SURGERY OF THE RECTUM

THE SURGERY OF THE RECTUM

COMPRISING THE

LETTSOMIAN LECTURES

ON

SURGERY

DELIVERED BEFORE THE

MEDICAL SOCIETY OF LONDON, 1865

BY

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FIFTH EDITION

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DEDICATION

My Dear John Gay,

It is with sincere pleasure that I again dedicate this little work to you.

Pray accept this act as a slight token of my esteem for you, and of my appreciation of a friendship which has been extended to me for nearly the whole of my professional life.

Yours faithfully,

HENRY SMITH.

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PREFACE

TO THE

FIRST EDITION

The Three Lectures of which this work consists were delivered before the Medical Society of London, in my capacity of Lettsomian Professor of Surgery for the year 1864-65. My observations were on each occasion so favorably received by a large and attentive audience, that I hesitate not to publish them just as they were delivered. The entire subject of the Surgery of the Rectum could not, of course, be discussed within the time allotted for Three Lectures, and therefore my object has been to draw attention to some of the more important points connected with this department of Practical Surgery, especially to those points upon which the information contained in books of special writers is somewhat scanty. It will be perceived that the use of my improved clamp in the treatment of hæmor-

rhoids and prolapse of the rectum is fully explained, and, together with the record of my experience of the method recommended, forms the subject of the whole of the last Lecture; and I trust that these details will assist the members of our profession in coming to some conclusion regarding the value of a plan of treatment safe and better, in my humble opinion, than any other hitherto practised.

82, Wimpole Street,
Cavendish Square.

CONTENTS

PAGE

Introductory Chapter xxi

LECTURE I

On some points connected with Fistula in Ano . 1

LECTURE II

On Stricture, Cancer, and Polypus of the Rectum . 42

LECTURE III

On the Treatment of Hæmorrhoids and Prolapsus . 88

On the Painful Ulcer of the Rectum . . . 170

INTRODUCTORY CHAPTER

When I first brought before the profession my little volume on the Surgery of the Rectum, which, in fact, consisted of a series of three lectures I had the honour to deliver before the Fellows of the Medical Society of London in 1865, I had no idea that the work would be received with so much favour that several editions would be called for, and in issuing each of these I have contented myself with the same fragmentary style as I adopted originally. I did not intend to offer the book as a treatise on Diseases of the Rectum, and I only selected certain points connected with this department of Surgery where I thought there was scope for some further investigations and suggestions which might be useful to my professional brethren. It had occurred to me, in contemplating the issue of the present edition, that it would be well were I to make use of my more extended experience, and by considerable addition to the work make it the

foundation of a treatise on Diseases of the Rectum generally; but not only did the calls on my time prevent me from devoting the attention I should desire for accomplishing this object, but I had already contributed to Holmes' 'System of Surgery' the article on "Diseases of the Rectum," and the author of that 'System' has recently called for a third edition of my article. Under these circumstances I determined, whilst adhering mainly to the original plan, to make some considerable additions to the work, additions which were warranted by my largely increased experience, and which, I trust, will render the book more useful; at all events, I have made endeavours in the present issue to deserve further the credit given to me of having brought before the profession a work which was essentially practical.

With this view I will offer here, in this Introductory Chapter, some remarks on the study and examination of these maladies which may be of use both to the busy general practitioner and to the surgeon who may not have had much opportunity of treating diseases of the rectum. It is a matter of observation, deduced from facts, that a very large amount of suffering and deterioration of health are produced by diseases of the rectum, and equally true is it that comparatively little attention has been paid to this subject. The result is that a considerable number of practitioners are

not so well informed on the diseases of this part of the body as they otherwise might be, and those surgeons who have opportunities of seeing diseases of the rectum on a large scale, both in private and hospital practice, not unfrequently have evidence of the errors which are committed both as regards diagnosis and practice in connection with these special maladies. There are several reasons for this; in the first place, students, as a rule, whilst diligently investigating other surgical affections, care little for making an acquaintance with the pathology of the rectum, and unless they should happen to be under the influence of a teacher who, in common with other knowledge of surgery, possesses a sound acquaintance with the diseases of this locality, and takes as much trouble in demonstrating them, they will, in all probability, complete their curriculum—even acquire a good knowledge of surgery generally, and yet understand little of rectal disorder, and take none of the interest in it which the importance of the subject demands.

This indisposition to investigate these diseases influences them when they enter into practice, and accordingly one meets with instances of serious rectal disease productive of immense suffering which have been entirely overlooked, or, at least, have been most inefficiently treated.

It is somewhat surprising that this should be so, because the greater number of these disorders pre-

sent marked symptoms, provoke great distress and deterioration of health, and are in reality, when properly treated, more readily cured and relieved than are most of the maladies the surgeon has to treat.

It is true that the investigation of diseases of the rectum entails considerable trouble, and is occasionally in obscure cases surrounded with great difficulties, but these are never insurmountable, for the power of discriminating between healthy and morbid texture, and the education of the senses of touch and of sight, may be brought within the grasp of all who will take the necessary trouble. He who, in fact, would wish to make himself thoroughly acquainted with a subject which is somewhat difficult to learn, should be animated by the spirit of Cardinal Mezzofanti, who was induced to make himself master of so many languages because on one occasion, when he was called to give religious consolation to a dying sailor, he could not do his duty to the poor fellow because he did not understand a word of his language. Difficulties did not deter the Cardinal. Another reason for the comparative neglect of the study of diseases of the rectum consists probably in the fact that until comparatively recent times the diseases in question were not made the subjects of much study by surgeons of the highest class. They were subjects which were handled somewhat freely either by

quacks or men of inferior repute, until at last a period arrived when men of the highest reputation, like the late Mr Copeland, Professor Syme, Mr Curling, and others, devoted special attention to these diseases, and thereby contributed much to the knowledge which is now possessed by many surgeons on the subject.

I had excellent opportunities of seeing cases of disease of the rectum at a very early period of my career, as the late Sir William Fergusson was largely consulted thereupon, and, indeed, he informed me that he intended to publish a work on Diseases of the Rectum, but about this period the demands upon his time became such that he was unable to carry out his project. He, however, during the entire of his surgical career not only paid especial attention to these diseases, but failed not to draw the attention of his pupils to them as an important class.

I think it may be useful if I here give a sketch of the method which should be employed in making the examination of a patient who is suffering or is supposed to be suffering from some disease of the rectum, for there is no class of surgical disease in which it is more important to make an accurate diagnosis, for upon the diagnosis only can the foundation of correct treatment be laid.

In the first place, when the surgeon is brought into contact with a patient suffering from disease of

the rectum it is highly important that he be made acquainted with the history of the case, both from the patient himself and, if possible, from the ordinary medical attendant. It is true that in a great number of cases a careful examination by the surgeon of the local disease will suffice for a proper diagnosis, and thus very valuable time will be spared which otherwise would be wasted in listening to a long and complicated story; but in the more obscure forms of rectal disorder a carefully detailed history of the case, furnished by an intelligent patient, will materially assist the surgeon in forming his opinion. I need hardly refer to the importance of such a history when there is a suspicion of an internal fistula existing, and where examinations have been made without the disease being detected. The preceding pain, then the discharge from the bowel followed by relief, the subsequent daily uneasiness and pain following the action of the bowels and any great exertion, all these lasting, perhaps, for months, will lead the careful investigator to make a correct diagnosis. Or, again, to take a case of contraction of the bowel, how important it is to learn the previous history of any syphilitic attack or of any attack of dysentery or long-continued diarrhœa!

The examination of the rectum should be instituted with very great care, and for this purpose the patient should be exposed to a good light. If

the subject be a male, it will be sufficient in a great number of cases that he should either kneel down on a couch or bend his body over the back of a chair, so as fairly to expose the buttock. If the patient be a female, it will be necessary, for obvious reasons, that she should recline either on a couch or in bed on her side, so that the surgeon may be enabled to examine the part efficiently without any unnecessary exposure.

In those cases where the disease is confined to the outlet of the anus mainly, the surgeon can inspect the parts and make an accurate diagnosis, without the aid of an assistant or nurse, by carefully separating the edge of the buttocks on both sides with the palms of the hands placed flatwise—not merely by the tips of the fingers or thumbs, as is too often the case—and then the anal orifice and the immediate neighbourhood can be thoroughly examined, any abnormal appearance, any breach of surface will be recognised, and by the cautious application of the sense of touch any induration will be felt.

For the examination of the interior of the rectum it will be better if possible that the surgeon should have some one with him to hold the buttocks on one side for the purpose of permitting him to have both his hands free, and then a most careful examination must be made by means of the introduction of the forefinger well oiled and slowly introduced into the bowel. At the time this is being done the

patient must be told to bear down, and in this way relax the muscles; the finger should be swept most carefully and slowly round the bowel in every direction and as high up as possible; in this way the condition of the part will be accurately gauged so far as the sense of touch is concerned, and in a great number of instances, even of obscure disease, the experienced finger will alone enable the surgeon to make his diagnosis. If, however, this cannot be satisfactorily arrived at, and if there be a suspicion of some ulceration or internal fistula, it will be absolutely necessary that a thorough exploration of the bowel should be made by means of a speculum, of which instrument there are many varieties, but for years I have been in the habit of using two kinds alone. The bivalve speculum, made of metal and silvered or protected by ivory, is to my mind far the best. It is introduced slowly, with the blades closed, and then, when the rectum has received it, the blades are caused to expand slowly by means of pressure effected on the handles, and the blades are kept in an expanded state by means of a screw fitted to the instrument; in this way the bowel itself, as well as the anal orifice, are thoroughly stretched and every point can be reached both by the eye and the finger. The other form of speculum is that which was invented many years since by the late Sir William Fergusson, consisting of a thick glass tube, silvered inside and protected by varnish, and having

a hole or slit in its side near the extremity. This is an admirable instrument for examining for hæmorrhoids or polypus as well as for use in applying nitric acid to the interior of the bowel; but I had a bad mishap with one of these some years ago. Whilst examining the rectum of a patient with it and turning it round it suddenly broke inside the bowel and I could not extract it. Fortunately it passed away without doing any injury. This occurrence led me to advise Mr Matthews to construct them for the future with a covering of gum-elastic webbing material on the outside; in this way breaking is almost impossible.

I need hardly say that previous to these examinations which I have described the patient should be told to get the bowel unloaded by an aperient, and, if possible, an enema as well.

In instances of fistula, either complete or incomplete, and of ulcer of the bowel, it will be needful for the surgeon to make use of a probe. This seems a simple matter, but its use requires great care and gentleness, as otherwise it will not only cause great pain to the patient, but, seeing how readily a stiff silver probe may be thrust through the tissues about the rectum, the surgeon may be sadly misled if haste or violence attend upon his manipulations.

As regards the use of the probe, I find that I employ it less and less each year for the preliminary

examination of a case. If I find from the history of a case of fistula, furnished to me either by the patient or the medical attendant, that the disease has lasted for some time and has resisted ordinary treatment, I defer the examination with the probe until such a time as an operation is to be performed, and then when the patient is subjected to anæsthesia the aid of the instrument is most valuable and of course painless.

In some instances of obscure and painful disease of the rectum it is not advisable to institute any examination of the interior of the bowel until the patient is first placed under the anæsthetic agent and is arranged in the same position before a good light as though he were to undergo lithotomy.

I need hardly insist upon the necessity of making the most careful examination into the condition of the various organs of the body before any operation be undertaken ; above all should a thorough testing of the urine be instituted.

I will take this opportunity of acknowledging the services of those gentlemen who have been associated with me in the numerous operations, and in the treatment of many severe and anxious cases of the diseases referred to. Their assistance in the operations themselves and in the conduct of the cases afterwards, during my absence, has been of the greatest value to me. I refer especially to my colleagues, Mr Royes Bell and Mr William Rose, to

Mr Boyce Barrow, the Pathological Registrar, and to my son, Mr Hugh Smith, the Surgical Registrar, at King's College Hospital. To all and each I return my grateful thanks.

ON THE

SURGERY OF THE RECTUM

LECTURE I

ON SOME POINTS CONNECTED WITH FISTULA IN ANO

Mr. President and Gentlemen,

I ought, perhaps, to make some apology for bringing before you the subject I have chosen for the three lectures which I have the honour to deliver before you; but I must beg your indulgence on account of the great importance which has been of late years attached to the pathology and surgery of the rectum. I must also request you to bear in mind what a vast amount of suffering is produced by these diseases, how readily the majority of cases are susceptible of relief and cure in careful hands, and on the other hand how easily and frequently they are mismanaged when they are treated by the ignorant and careless.

It would be out of the question for me to attempt anything like an inquiry into the pathology and surgery of the rectum generally, in a period of time extending over three hours, even if it were desirable to do so; and therefore I propose to bring before you some of the more interesting points connected with the surgery of these diseases, to discuss some questions about which surgeons are not yet in accord, and to subject to your consideration some methods of treatment which I have been led to adopt in certain diseases of frequent occurrence and great severity. I propose in the first place to consider some points connected with fistula in ano and stricture of the rectum; I shall then offer some observations on cancer; the subject of polypus of the rectum will receive some attention at my hands; and these lectures will be brought to their conclusion by a reference to my experience of the treatment of hæmorrhoids and prolapsus.

It is a fact somewhat curious, yet at the same time one highly satisfactory as regards the character of surgery, that many of the most important facts connected with the pathology and surgery of special diseases, if I may so term them, have been furnished or pointed out to us by those most eminent as writers on general surgery, and as regards the subject of fistula in ano, we are mainly indebted for what we do know to the writings of Pott, of Brodie, and of Syme; and one of the most important points con-

nected with the subject, viz. the primary formation and cause of the disease, has very been carefully considered and discussed by the two latter eminent surgeons. Brodie, after a large experience, and apparently very careful consideration of the subject, promulgated the view that in cases of fistula in ano an internal opening in the bowel always existed, and that the first step in the production of the disease was ulceration of the mucous membrane and the formation of the aperture in question. This doctrine was strongly maintained for some time, was thought to be correct, and I doubt not, was productive of very considerable errors in point of practice. Mr. Syme, on the other hand, maintained with equal determination that in cases of fistula in ano "the mucous membrane always remains entire in the first instance, and is never perforated until after suppuration has taken place."

It is a somewhat strange circumstance to find these two eminent and equally careful observers totally at variance upon what must be simply a matter of fact, not, perhaps, so easily recognised as some writers would lead us to believe. It is, however, pretty universally admitted and taught in the present day that in the majority of cases of fistula in ano the first pathological change which takes place is an inflammation and induration in the cellular tissue around the rectum, and if this be not arrested suppuration occurs, and the matter not

finding a free vent externally, discharges itself by a more or less circuitous rout into the cavity of the gut. An exception must be made, of course, to those cases where an aperture has been made in the mucous membrane in consequence of the adhesion or penetration of a foreign body, such as a nail, a bristle, or a fish bone. Moreover, there are cases to be met with where, from the history during life, and from the morbid appearances after death, there is every reason to believe that the ulceration of the mucous membrane has been the primary cause of the mischief; this is more noticeable in certain cases of bad fistula occurring in the persons of those long resident in warm climates, and who have suffered from dysenteric inflammation of the colon and rectum—here several apertures in the mucous membrane of the bowel will be found to exist.

It might be supposed that it is not of much consequence, in a practical point of view, to define with exactness the first series of pathological changes in the formation of fistula; but a careful consideration of the phenomena will lead us to the conclusion that a correct appreciation of the morbid changes must of necessity lead here, as elsewhere, to a proper line of practice; and on the other hand that an unsatisfactory and undecided plan of treatment will result if the primary steps in the production of a fistula be not clearly apprehended. I shall have to say more upon this point by-and-by.

As an instance of the manner in which fistula is sometimes caused, I may mention the case of a gentleman who came to me one day in great distress both of body and mind. On examination I found he was suffering from a discharge from the rectum and great pain. There was a painful swelling by the side of the anus, and on examining with the speculum I found a large ulcerated opening. The patient confessed that seven weeks previously some instrument had been thrust up the rectum by a prostitute, this was followed by intense pain and other symptoms, for the relief of which he deferred seeking surgical aid, being ashamed to confess the cause of his trouble. On placing this gentleman under chloroform, I found that the opening was the starting point of a fistula which extended to the ischio-rectal fossa, and which I laid thoroughly open, and which in course of time quite healed up.

We sometimes meet with a case where an external injury, followed by inflammation and suppuration, appears to be the cause of fistula. In one of those rare instances of fistula occurring in very young persons, I ascertained that before the symptoms appeared the patient, a young gentleman of fourteen, had been riding a bare-backed horse. In young persons the cause of fistula will for the most part be found to be traumatic in some form.

As there was at one time a considerable difference of opinion in reference to the precise formation of

fistula, so in like manner surgeons and pathologists have been at issue with regard to the locality and existence of the internal opening; for of course we cannot appreciate a complete fistula in ano without an internal opening being present as well as the external aperture. Brodie enunciated the doctrine that an internal opening in the bowel always existed; holding the views he did that ulceration of the mucous membrane was the primary step in the formation of the fistula, he could, of course, come to no other conclusion; and thus is shown how one error in pathology, as in morals, leads to the commission of another, for it is undoubtedly a fact that many cases of fistula in ano are met with wherein a sinus is left as the result of an abscess, has lasted for some time, and yet no internal opening can be found; to this it may be objected that those who maintain this opinion do not look for the opening in the right place; but, on the other hand, it is urged that a careful inspection of the parts after death has given convincing proofs that cases not unfrequently happen where, notwithstanding the formation of a long and tortuous sinus by the side of the rectum, the cavity of the intestine has remained intact, and hence the very proper distinction drawn by surgical writers between what is termed complete and incomplete fistula. As an illustration of the difficulty and even impossibility of always detecting the inner opening, I will mention the case of a young gentle-

man who was referred to me by Mr William Adams. He had had an abscess near the rectum some weeks previously; this was opened by a surgeon and the wound healed up, but uneasiness had continued still, and there was occasionally a slight discharge of matter from the rectum. I examined the patient most carefully, but I could not detect anything wrong. Several weeks again elapsed and the patient was brought to me still complaining of the same symptoms. I detected a very slight induration at the seat of the old incision, and on using very firm pressure with the finger a drop of matter exuded from the anus. I sent the patient home, and when he was under the influence of chloroform I introduced a speculum, made a most careful examination, but could not find any internal opening. I then made an incision into the external cicatrix and passed a probe along a sinus for about an inch, when it impinged upon the mucous membrane, but I could not discover the opening. I divided the sinus freely and the patient soon recovered. There must have been an internal opening here, and doubtless it had existed for months. And whilst I am on this subject I will state that occasionally there is a great difficulty in finding the external opening of even an extensive fistula, especially when there is any induration of the integument around the anus. A striking example of this occurred in my practice in the person of a fine officer of dragoons, who, suffering for some

time from uneasiness near and discharge from the parts near the anus, consulted a surgeon of the highest eminence. He was informed that he had got external hæmorrhoids, and that they must be removed. On examination I found, as had been stated, that there were several indurations near the anus, somewhat like condylomata, and had it not been for the fact that the patient especially complained of the discharge, I should have contented myself with giving a similar opinion to that which had already been formed; but on searching very carefully between two of the indurations I discovered a small opening; this ran for a long distance up by the rectum, and on performing the operation for fistula a few days afterwards I discovered a branch of the sinus running for some distance across the buttock. Now, the question of the universal presence of an inner opening is by no means simply one of interest in a pathological point of view, but it is really of importance, practically speaking. We are very frequently asked by patients in private life as to the absolute necessity of an operation for fistula, and we are chiefly guided as to our answers by our investigation of the inner portion of the sinus; if we detect an opening in the bowel we may state with certainty that an operation is necessary; but, on the contrary, if after a very careful examination we cannot detect any internal opening, more especially if the disease has not existed long, we may hold out

some reasonable hopes that the fistula may heal up without resorting to the knife; at all events, that the major operation of dividing the sphincter ani muscle may be dispensed with. It is not very often, it is true, that our hopes are verified, but every now and then we meet with cases where a fistula not communicating with the gut may heal up. Such a case has recently occurred to me in the person of a cavalry officer, a patient of Dr. Jephson, of the 5th Dragoon Guards, who came home invalided from India for the express purpose of having an operation for fistula performed. I performed the operation upon him, and he got quite well; about six months after this he consulted me again, in a very weak and depressed condition of health, and on examination I found that he was suffering severely from a large abscess in the ischio-rectal fossa. I promptly opened this, but as some delay had occurred in the treatment of this case whilst he was in the country, I found, as expected, that a long sinus had formed, running some distance up by the side of the rectum, but I could not detect any aperture in the bowel. He was, of course, most anxious to avoid another operation, and, although I dared not hold out much hopes, I commenced treatment with the view of closing the sinus; this consisted in the administration of tonics and liberal diet, and the occasional introduction into the sinus of a probe dipped in a strong solution of iodine; the health began to improve

very rapidly, the sinus got less and less, and in the course of a few weeks it had entirely healed.

Before a very careful and correct investigation was instituted into the nature and pathology of fistula, surgeons laboured under the impression that in most cases of complete fistula the inner opening was situated either at the extremity of the sinus, or, at all events, would be found some two or three inches up; but it is now an admitted fact, and one capable of demonstration, that in the majority of cases where there is a fistulous communication with the bowel the opening is situated within half an inch or an inch of the verge of the anus. It has indeed been stated that the opening is always within one inch and a quarter, but there are exceptions to this. I have recently inspected the parts concerned in this disease after death, where a fistula ran up by the side of the bowel, and then opened into it at least two inches from the anus. There is no reason, anatomical or mechanical, why the internal opening should not occasionally be situated higher up than one or even two inches, and experience tells us that every now and then such cases are met with. I have lately had under my care in King's College Hospital, a young man, who had a communication between the rectum and the ischio-rectal fossa on each side, and the inner opening on either side was quite, if not more than, two inches from the anal orifice. I am somewhat under the impression that

too much has been made of the undoubted fact of the internal opening being found in many cases close upon the anus, and that an erroneous practice is in some cases the result of a too great reliance upon the supposed unvarying seat of the inner opening; for it is laid down as an axiom in surgery that the incision needful for the cure of this disease should be confined to the limits of the external and internal opening. When the inner opening does exist, and in the situation referred to, I believe we need not carry the point of the bistoury further than this spot; but it does not follow that in those cases where an internal opening does not exist, and where the sinus runs some distance up the bowel, that we should in all cases limit our incision to that point where the internal opening is generally expected to be found.

In connection with this part of my subject I am led to consider the question of a very annoying and serious result of an operation for fistula in ano which is occasionally met with, viz. a loss of power of the sphincter, and consequent inability to retain the contents of the rectum; when it does occur it naturally causes to the unfortunate sufferer a vast amount of annoyance and misery. It is found to occur under different circumstances, sometimes when only one operation has been performed, at other times when one, two, or three operations have been done. I have recently had occasion to meet with

several instances of the kind, and consequently have been endeavouring to ascertain how far any particular kind of operation may tend to this result, but I have not been able to solve this problem in a manner satisfactory to my own mind; and I have not been able to obtain any assistance in this matter from the writings of those gentlemen who have hitherto made the subject of disease of the rectum a particular study. Thus, on looking into the works of Syme, Bush, Curling, and Ashton, there is either no allusion to this very important point, or the circumstance of a loss of power to retain the fæces is merely mentioned as the result of an operation, but no attempt is made either to explain the occurrence or how to avoid it.

That this very unfortunate result does not unfrequently take place I am satisfied from my own experience, and it is one of the points about which patients in private practice are very particular in their inquiries; for they very naturally consider that the want of power to control the fæces is a greater misfortune than the presence of a fistula. It is thought by some, that this result is only likely to occur when the operation for fistula has been performed on both sides, or when repeated incisions have been made through the sphincter. It is true that it does occur in a more severe form after the muscle has been cut through on either side. I have recently discharged a man from King's College

Hospital where a deep sinus into the rectum was divided on both sides, and almost entire control over the rectum was lost; but I have also recently met with a case where the same lamentable result followed after a single division of the gut; so that the patient, a gentleman in active business, considers himself in a much worse condition than he was in before the operation. Then, on the contrary, I have met with cases where two, three, four, or five incisions have been made through the sphincter, and yet the power over the rectum has remained complete. Under these circumstances, it is somewhat difficult to come to any conclusion as to what this occasional loss of power results from. It is supposed by some that, in many of these cases of fistula and other rectal diseases, a weak and dilated state of the external sphincter obtains, and that, even after it has been divided only at one point, this weakness will be exaggerated and a loss of control over the evacuations be the result; this may be true, and perhaps is so to a certain extent, but, as far as my own observation goes, I have no reason to conclude that there is often a great weakness of the external sphincter in connection with fistula; the observation, however, undoubtedly applies to instances of hæmorrhoidal affections and old cases of prolapsus, but we are not dealing with these diseases now.

It appears to me, after some reflection and consideration of some cases where this unfortunate

result has occurred, that the loss of power depends not so much upon the division of the external sphincter at one or more points, as upon a free incision carried through the internal sphincter and circular muscular fibres of the rectum. There can be no doubt that these muscular fibres act not only as propellers of the contents of the gut, but perform the office of a sphincter as well. This fact may readily be ascertained by the introduction of the finger high up into the rectum in healthy individuals, when it is felt that not only the external sphincter, but that the circular muscular fibres of the gut compress the part introduced very powerfully; and thus it is easy to understand that when a free division of these fibres as well as of those of the sphincter externus is made, a corresponding loss of power will be the result. In the instance I have mentioned, where a complete loss of power was produced by a single operation, the sinus ran up several inches by the side of the rectum, and a very high incision was necessary; in the case I have alluded to as occurring after an incision of the bowel on either side at King's College Hospital, the knife was of necessity carried up at least two inches from the anal orifice; and in a third case which occurred to me in private, two previous operations had been performed of an extensive character, unfortunately too, not only producing loss of power, but resulting in failing to cure the fistula.

If the explanation I have offered be the correct one, it is clear that in our operations we should confine our incisions as much as possible to the lower extremity of the bowel, and fortunately it is found by experience that the division alone of the external sphincter muscle in the direction of the fistulous sinus is sufficient to produce a satisfactory cure; but, as I have before stated, there are exceptions to this rule, and when a sinus runs up in the direction of the cavity of the bowel, and perhaps opening into it as high up as two inches, or as far up as four inches, which occurred in a case of Sir W. Fergusson, it becomes a question whether we should submit the patient to a reasonable chance of failure to cure the disease, or run the hazard of producing a worse state of things in the shape of a loss of power over the rectum, more or less complete.

It is not, however, to be supposed that because a patient has lost power over the rectum after an operation for fistula, he must, of necessity, always suffer from this very grievous misfortune. On the contrary, we may give a reasonable assurance that as time goes on, and a more thorough cicatrisation of the wounds takes place, a more or less complete control over the part may be regained. I have had more than one instance of this occurrence in my own practice, and I cannot do better than mention the following as an apt illustration:

M. R—, aged twenty-nine, was sent to me by

Dr Hensley, in December, 1859; he was in very good health, with the exception of the local complaint. He informed me that early in the spring he was operated upon for fistula by a well-known and able surgeon; the wound, however, was very sluggish, and never entirely healed, so that in the course of the summer he submitted to a second operation at the hands of the same surgeon. Notwithstanding all care this wound also refused to heal up entirely, and on inspection I detected a fistulous opening in the right side of the buttock, which on careful examination I found led into the bowel, one inch and a half from the anus; but just before the termination of the fistula the finger came in contact with a narrow constriction of the bowel. In addition to the discharge, the patient suffered from difficulty in passing his motions, which only came away in very small pieces; moreover, he had the misfortune of a loss of control over the rectum, not complete, but worse at one time than at another. His health was in all other respects very good, and although it was an ugly case to operate upon, and it was impossible to say whether a complete loss of control over the sphincter would not result from a third division of the muscle, I determined to undertake the case, and previous to making an incision I commenced the dilatation of the stricture by the daily introduction of bougies. When a fair-sized instrument could be passed I laid open the sinus

through its entire length, dividing the stricture as well. Very great care and trouble were taken in the after-treatment of the case, and I watched with much anxiety the result of this third operation. At first it looked as though the patient's troubles were added to instead of being diminished, for the loss of power over the sphincter was increased, but not totally lost. By the careful introduction of the bougie, however, at each daily dressing, the stricture was prevented recurring, the wound put on healthy action, and in the course of a few weeks I was rewarded by seeing the operation completely successful in its primary object, viz. healing the fistula; the loss of power, however, remained. With a double view, therefore, of obviating contraction and of exciting the bowel to healthier action, I desired the patient to pass a large bougie of black wax for himself three times a week. By degrees he not only passed his motions much more easily, but in the course of a few months he began to regain the control over the sphincter; in six months after, the wound had finally healed. There was complete control, except when he took aperient medicine. This power gradually and surely returned, and when I last saw this patient, which was about three months since, and four years after the operation, he was quite well, having discarded the use of the bougie and regained the power over the rectum; at times, if he takes purgative medicine, he is obliged

to be careful, there being on such occasions a tendency for the contents of the gut to escape. I have detailed this case, not only for the purpose of illustrating the point I have been referring to, and which, curiously, has not attracted the attention of previous writers, but also of its bearing upon the connection of fistula with stricture of the rectum, a matter to which I shall draw your attention in a particular way by-and-by, when I shall have again to bring this case to your recollection.

It will be perceived that in the treatment of this case I laid particular stress upon the employment of the rectum bougie, and I strongly advocate its use after an operation for fistula, and more especially if the incisions have been of such a character or repeated so often as to lead one to the supposition that a weakness of the muscular tissues of the bowel may result. I believe that the bougie is useful in stimulating the bowel to a healthy and more vigorous action, and that it assists materially in restoring control over the rectum. I have mentioned this accident a little more prominently, perhaps, than you may think it necessary in this place, but the fact is loss of power of controlling the sphincter is a most deplorable result of the operation, and one much more common than it is thought to be; and if, by limiting our incisions during the operation, or by a more careful treatment afterwards we can prevent this occurrence, we shall confer a great

benefit upon our patient and lessen our own anxieties and responsibilities.

I have at this moment under my care, November, 1867, a gentleman who has undergone two severe operations for fistula. He consulted me first three years ago for loss of control over the sphincter, some months after the last of these operations. I recommended the daily use of a large rectum bougie and attention to his general health; he paid strict attention to these matters, and he has completely regained the power of the sphincter. I may mention that in this case a very deep incision was made into the rectum. This circumstance corroborates my opinion that the loss of power after the operation for fistula depends more upon cutting through a large extent of the bowel than dividing merely the external sphincter in several places, and this is further shown by another case recently under my care of a gentleman aged sixty, who, within three years was obliged to submit to three different operations for fistula, but there is complete control over the bowel—here I cut the external sphincter only on each occasion.

Since the issue of the last edition, I have met with a case which illustrates the mode of production of loss of power over the bowel. A fine powerful old soldier, aged seventy, was admitted into King's College Hospital suffering under this misfortune. He informed me that he had entirely lost power over

his lower bowel, that the contents of the rectum came away from him whilst he was at work. On examination I found the cicatrices of wounds made by different surgeons for the cure of fistula, and I was informed that six various operations had been performed. The sinuses had completely closed. The orifice of the anus was dilated and the sphincter was very weak. There was also some prolapsus of the mucous membrane. The man was anxious to undergo any operation for the relief of his miserable condition. Accordingly I removed, by means of the clamp and serrated cautery, two folds of the prolapsed membrane, and then with scissors I excised three long folds from the skin of the anus and at right angles to the orifice. The result of this operation was of the most satisfactory character. As the wounds slowly healed the parts became contracted, and the power of retaining the contents of the bowel gradually returned, and ultimately the patient left the hospital quite well.

This case showed that the loss of power over the sphincter was due to the repeated division of this muscle as stated above. The result of my operation was such as to justify the surgeon adopting a similar line of practice in a case of a like nature, however unpromising the features of it may appear to be.

I have now to bring before you some observations on a very important point connected with the subject of fistula in ano, one also which has not attracted so

much attention as it deserves. We are all aware that occasionally, and, indeed, I may say frequently, the efforts and care of the surgeon are thwarted, and the incision made in dividing the sphincter does not heal up; in fact, the fistula either remains in the same condition as before, or there exists even an opening of considerable size, which steadily refuses to heal up. Now, it is a very important matter to inquire very carefully into the causes of failure after this operation, and in many cases we shall fortunately be able to ascertain what it is which has rendered one or perhaps more operations wholly unsuccessful. It has fallen to my lot, as, doubtless, it has to many other surgeons, to be consulted about several very interesting cases of this description, and the result of my observation is that in most instances the failure of the operation has been only for a time. By searching carefully, some cause, constitutional or local, will be found out and, especially when the latter exists, it can be remedied. I do not mean in this place to say much about the constitutional causes of failure, because it is well known that there are certain conditions of the system not unfrequently coexisting with fistula which, in reality, are a part and parcel of the disease, and the latter is only one link in the chain of morbid phenomena which are slowly but surely taking the patient to his last home. Thus, for instance, it is a well-known fact that tubercular disease of the lungs is seen very often in

connection with fistula, although, perhaps, not quite so often as it is supposed to be. Then, again, it is equally well known that those who have lived a long time in hot climates, and have damaged their livers and digestive canals by high living and want of exercise, are particularly prone to suffer from abscesses about the rectum and fistula of the very worst kind. Now, except under peculiar circumstances, which I have not time to consider here, no scientific surgeon would think of performing an operation, because he knows that the incisions he makes will not heal up, and that he may place the patient in a worse condition than he was in before, by weakening the power of the sphincter. But there are certain local circumstances in connection with this malady which will prevent the success of an operation, and here one surgeon shows his superiority over another by finding out beforehand what these circumstances are, and how they may be met.

It is a somewhat curious fact that the connection between fistula in ano and organic stricture of the rectum has not been much insisted upon by surgical writers. When we see a case of fistula in perineo the constant association between that disorder and stricture of the urethra is at once brought before us, but it is so seldom that we hear of a fistula in ano spoken of as occurring in connection with a stricture of the bowel that we almost ignore, practically, at

least, the possibility and probability of such a condition; but my own observation has led me to believe that in a considerable proportion of cases a stricture will be found to exist with fistula in ano, and that a failure to cure the latter disease by operation has simply been the result of overlooking the other morbid condition of the bowel; and it may be readily overlooked if the finger is not passed well up the cavity of the bowel, and if the contraction be seated, as it is at times, beyond an inch and a half or two inches. In some of the cases where stricture does exist coincident with fistula there can be no doubt that it has been the original disease and that the fistula is a secondary phenomenon, but in others there is every reason to believe that the contraction of the gut ensued upon the fistula. In some cases the situation of the internal orifice of the fistula is above the stricture, in others the orifice is either below or in the centre of the contraction. There can be no doubt, however, that, whether the stricture be primary or secondary, it should be looked upon as the chief disease when it is associated with fistula, and that it will be of no use to attempt to cure the latter by operation without first, or at the same time, taking measures to get rid of the former.

In the case which I detailed above, in order to illustrate another point, it will be perceived that two operations had been done previous to my seeing the patient, and in my endeavours to ascertain the cause

of failure I discovered a stricture of the bowel; of course it is impossible to say for certain whether this condition existed previous to the first operation, but it is most probable that it did, and that the failure after each incision was due to the fact of the stricture being overlooked, for the character of the surgeon who operated was such as to ensure perfect skill and knowledge in the proceeding itself. Had I simply contented myself with dividing the sphincter again in this case, I doubt not there would have been a third failure, but the use of the bougie on several occasions previous to the operation, combined with subsequent division of the stricture, was sufficient to ensure a speedy and permanent cure.

As another illustration of somewhat the same kind, I may mention a case of a naval officer, whom I saw some time since, with very bad fistula of some years' standing; the patient had undergone a good deal of treatment, but he was in a deplorable condition, and on examining him carefully I discovered a very tight stricture of the rectum, about two inches from the orifice of the anus. I divided this with the knife, and in a short time had well dilated the gut with great comfort to the patient, but the fistulous sinuses were so extensive that I did not deem it prudent to lay them open into the bowel, I thought it better to leave matters alone and ascertain whether the openings might not close as the contracted gut became more and more dilated.

Mr. Tufnell, of Dublin, has drawn the attention of the profession more prominently than any other writer to this subject, and in his little monograph has detailed a case somewhat similar to the one just referred to, and in which he contented himself with dilating the stricture and leaving the sinuses alone; and so little annoyance was subsequently caused by their presence that the patient did not care to be operated upon.

From the many cases I have seen where fistula in ano coexists with stricture of the rectum, I am led to believe that the failure of the operation is not unfrequently attributable to the stricture being overlooked. It is easier to overlook this condition than is imagined; we are too apt, when one symptom or morbid phenomenon is presented to us readily, to pay too much attention to that and overlook other and less striking manifestations of disease. How often do we see this in the case of diseases of the bladder, for instance. A patient presents himself with retention of urine as the most prominent and distressing symptom; to this the surgeon pays the chief attention, affords the necessary relief, and perhaps entirely forgets to explore the bladder for the purpose of ascertaining the presence of a stone, which may be at the bottom of all the suffering. So likewise in the case of the rectum. A patient may come to us with a fistulous opening as his only complaint; seeing this, we may content ourselves with the fact

of its presence, and entirely overlook the other condition. Notwithstanding that I am impressed with the necessity of examining very carefully for this and other morbid conditions in connection with fistula, I was temporarily led into error a short time since in the case of a middle-aged woman, who came amongst my patients into King's College Hospital, saying she had stricture of the rectum; on examination I discovered at once that she had a very tight contraction of the gut, two inches from the anus, and I made arrangements to divide it on some future day; but it was not until she was actually taken into the theatre, and about to be operated upon, that I discovered a fistula leading into the bowel beyond the strictured portion, and was thus prevented from making a very serious oversight.

Cases are every now and then met with where there is a fistula connected with, and apparently dependent upon, severe stricture, and yet where it is undesirable to perform any cutting operation, either upon the stricture or the fistula. A very interesting and severe case of this kind has recently been under the care of Mr Partridge, in King's College Hospital. A young girl, only sixteen years of age, presented herself at first amongst my out-patients with two fistulous openings by the side of the rectum; finding such an unusual occurrence as this condition in a girl so young, I examined her very carefully, and then ascertained that there was a very tight stricture

about one inch and a half from the anus, involving more than an inch of the bowel, and into the centre of this strictured portion the sinuses opened. She was admitted into the hospital, and after a few days Mr. Partridge placed her under chloroform, and, introducing his finger, dilated the stricture by that means. In the course of another week she was again placed under chloroform, and the strictured portion of bowel was further dilated by the fingers, so that a good-sized bougie could be passed. From this time a great improvement took place, the contents of the bowel passed with ease, and she was shortly dismissed from the hospital, vastly improved, although the sinuses had not healed up. Now, in this case it would have been highly injudicious to divide this stricture with a knife, as such a large portion of the intestine was involved. The indication evidently was to dilate the stricture first; and, should the sinuses not then close up, they might be divided at some future time. I may remark that this case was peculiarly interesting, insomuch as it was an instance of fistula and stricture occurring at a period of life when these diseases are rarely seen. I do not recollect ever having met with either fistula or stricture in a person of so youthful an age.

Whilst writing this Lecture a case has presented itself amongst my patients at the hospital which illustrates, in a remarkable manner, the points so strongly dwelt upon. A man about thirty consulted

me for fistula, and I immediately recognised the patient as one upon whom I performed a double operation for fistula and stricture at the hospital two years ago. At that time he had a bad fistula, for which he had previously undergone two operations, but without any good results. I therefore examined carefully into the case, and on introducing the finger I ascertained that there was a very tight annular stricture three inches from the anus. Here was the cause of the failure. A course of treatment was commenced with bougies, the stricture was considerably dilated, and then the fistulous sinus was laid open with complete success. The patient was told to use the bougie from time to time, but unfortunately he went to sea for a year and entirely neglected himself; the consequence is that there is a return of the stricture in as severe a form as before, and there is an open sinus by the side of the anus, which, in all probability, will require division; but previous to operating upon the fistula I intend, either by the use of the bougie or by incision, to dilate the stricture again thoroughly. I may also mention that I have at the present moment a case under my care, sent to me by our President, where there is a fistula in connection with stricture. I have been deferring an operation in order that I may dilate the stricture fully, and the amount of dilatation already effected has considerably improved the appearance of the fistula.

I cannot dwell too strongly upon the importance of thoroughly dividing the external sphincter in cases of fistula. I know that some surgeons adopt a different practice, and because success occurs in some trifling cases they come to the conclusion that it is not generally necessary to cut the sphincter. The majority of educated patients know full well the use and importance of this muscle, and they are only too eager to avail themselves of the chance of being cured of their malady, and readily fall in with the view of that surgeon who will tell them that they need not have the sphincter divided. Great disappointment will ensue in many cases if such a line of practice be adopted. Weeks and months will be passed over after such an operation, and at the end of this period it will be found needful to lay the sinus open again, and to include the sphincter within the incision. It is true that there are some instances of incomplete fistula where an internal opening does not exist, which will heal up when the sinus has been laid open without division of the sphincter, but it is equally true that in other similar instances failure will occur, and therefore seeing how little harm is effected by dividing the muscle, I recommend it to be done in all cases except, perhaps, in those of the most simple kind. One cause of failure I must particularly allude to here. An insufficient laying open of the sinuses in consequence of a patient being improperly anæs-

thetised. I have met with some notable instances of this kind. Every now and then the anæsthetic produces such unpleasant symptoms that the patient cannot be induced to submit to it, and if he be not dealt with by vigour and judgment, or if he be not properly secured beforehand, the inhalation will have to be suspended and the surgeon will be compelled to perform the operation when the patient is sensible. If the case be a severe one, it is most probable from the combined causes of the flinching of the patient and the timidity of the surgeon, that some sinus will be left unopened, or, at all events, inefficiently laid open.

A not infrequent cause of failure in an operation for fistula is a want of care in dressing the wounds. It is extremely important to pay great attention to this point, as in some cases sinuses which have been freely laid open by the knife, especially where they were very tortuous, have a great tendency to heal over on the surface only. In order to obviate this it is necessary to introduce a probe occasionally along the entire course of the incision, and to insert a small piece of lint between the edges of the wound from day to day. I am not advocating stuffing or plugging of the wounds as sometimes is practised, but it is very unadvisable to omit that careful attention which consists in lightly dressing the track of each incision.

A failure in the operation of fistula results some-

times from other local causes ; thus, for instance, a case may present itself where, together with a fistulous opening into the gut, there may be sinuses branching out across the buttock in various directions, and the disease may have lasted so long a time that the sinuses themselves have become lined by a distinct membrane, and the tissues around greatly indurated. I have met with a case of this kind where a previous operation had been performed and had failed, and where in a second and more successful operation it was necessary, in order to divide the indurated parts freely, to use a pair of powerful scissors, the ordinary fistula knife entirely failing to effect the necessary incisions.

Another cause of failure occasionally met with is the coexistence of disease of the bones of the sacrum. I attended a remarkable and interesting case of this kind with Sir W. Fergusson. The patient was an elderly man, who had suffered for years from very bad fistula. A severe operation had been performed by a very eminent surgeon, but without any favorable result. When Sir W. Fergusson saw him he inquired carefully into the cause of failure, and on examination detected at the bottom of the fistula a piece of necrosed bone. Very free incisions were made both into the bowel and in the direction of the sacrum, and a portion of completely necrosed bone, as large as a marble, was extracted, and in a few weeks the patient was sent home with the fistulous

sinus completely closed. There is no doubt that in this case the presence of the necrosed bone had been entirely overlooked.

Failure may result from an operation being imperfectly performed—in a case, for instance, where the fistulous sinus is apparently quite superficial, and hardly involving the external sphincter muscle; finding this to be the case, the surgeon contents himself with merely laying open the sinus without dividing the sphincter. This operation, however, will generally be useless, for, even although the sinus does not actually involve the fibres of the sphincter, it is really within its sphere of action, and in order to get it thoroughly healed it is necessary to paralyse the action of the sphincter for a time by dividing it, as well as by slitting up the sinus itself. A notable case has recently occurred in my own practice where this took place, the first operation having entirely failed in consequence of the surgeon not dividing the sphincter, as the sinus was entirely superficial.

I cannot too strongly urge the necessity of protesting against delay in performing the operation in instances of fistula when there is nothing as regards the general health to prevent its adoption. Patients consult us and frequently put the question as to whether any harm will result if the operation be delayed a few weeks or a few months. It is only right that we should tell our patients that in most cases

delay will be injurious, for when those pathological changes have occurred which result in the formation of fistula there is a tendency, especially in some constitutional conditions, for their continuance. And it will be found that, on examining a patient who has delayed an operation and has gone about his usual avocations, a second or a third abscess has formed and ended in one or more sinuses involving the bowel on the opposite side to that where the fistula originally existed. And this aggravated state of things will demand the division of the sphincter muscle in two or more places, and thus there will be a greater likelihood of more or less paralysis of the muscle after the wounds have healed up—and, at all events, should this unpleasant event not occur, the operation itself will require much more extensive incisions, and the convalescence of the patient may extend over many weeks or even months.

Not only is delay to be deprecated for these reasons when fistula is completed but it is equally to be opposed when suppuration is diagnosed to be present in the neighbourhood of the bowel, or even impending only.

It is difficult to understand how it is that not unfrequently practitioners will recommend their patients, who present themselves with distinct induration about the rectum and other signs of deep-seated suppuration, to apply fomentations and poultices until the symptoms of an abscess have more fully developed themselves.

This procrastination is most harmful in every possible way; a free incision should be made at once into any suspicious induration of at all a painful nature, and although in numerous instances fistula may already have formed, in other cases the timeous incision will most certainly prevent or limit it.

As regards *internal* fistula, I have met with several instances, and in most of these there has been considerable obscurity in the diagnosis, and extreme difficulty in ascertaining the existence of the malady. In more than one instance of ulcer of the rectum I have performed the operation of dividing the sphincter, and finding that the symptoms have continued, a further examination has revealed the existence of an opening in the mucous membrane along which a probe could be inserted for some distance. The similarity of the symptoms to those produced by fissure of the anus or the painful ulcer of the rectum will explain this difficulty in diagnosis. The patient will complain of uneasiness and pain on and after the action of the bowels; there will also be uneasiness at other times, moreover, there will be some discharge of matter occasionally. An examination without the speculum will not clear the case up; perhaps a small abrasion or fissure will be seen in the ordinary situation, and the surgeon thinking he has to do with an ordinary instance of fissure will divide the ulcer. For a brief period the operation is followed by relief, but

the symptoms return, and then on a careful examination with the speculum an opening will be found either just at the edge of the sphincter or perhaps well within it, and into this the probe can be passed upwards for a distance of one or two inches. Sometimes, as in a notable instance brought me by Dr Verdon, of Craven Street, the orifice of the internal fistula may be discovered at the verge of the anus by a careful examination without the aid of the speculum. Now and then, however, the opening is so small and hidden in such a manner that it may be overlooked even on the most careful examination by the bi-valve speculum; a case of this kind occurred to me not long ago. At first after the most careful inspection I could not discover anything, but the patient so strongly asserted, besides his painful sensations, he had a slight purulent discharge that I made another most careful examination, and at last detected a minute opening within the sphincter on the anterior wall of the rectum, and was enabled to pass a probe under the mucous membrane for nearly two inches.

When I first gave these lectures I had not met with many instances of internal fistula, or at least had not recognised the disease, but since my experience has been so much extended I have had various opportunities of meeting with them. The first case I met with was so striking and so interesting from various reasons that I will relate it at length.

In the month of September, 1862, a captain in the navy, between sixty and seventy, and of robust frame, consulted me for an affection of the rectum with which he had been troubled for several months. He resided in the country, near a large town where some very eminent surgeons practised, and he placed himself under the care of first one and then another, and he underwent a severe operation, the result of which, however, was not at all successful. When I saw him he was complaining of a continual discharge of purulent matter from the anus and pain in that situation. On the first examination I could not detect anything abnormal; there was no opening in the integuments outside the anus, there was no contraction of the bowel, and no appearance or sensation of ulceration. There, however, was the purulent discharge and pain, and there was no reason to suppose any ulceration or other disease of the bowel above. I was completely puzzled about the case, and referred the symptoms at first to that very useful ally of ours—gout. On his second visit, finding the symptoms still prominent, I undertook the most careful examination with the speculum, and after a long search discovered a small opening in the mucous membrane of the gut, from which issued purulent matter; this opening was seated about one inch and a half from the anus. On introducing a probe it coursed upwards for a considerable extent, running between the mucous and muscular tissues; the sinus

also extended downwards as well, but there was no other opening whatever. On very careful inspection there was a linear mark or cicatrix in the mucous membrane of some extent, the site of the operation which he had previously submitted to.

The case was clear now, the affection being a true internal fistula of the rectum, not involving the tissues around it in any way, nor implicating the external sphincter; and it was evident that the proper mode of treatment consisted in laying the whole track of the sinus open, both upwards and downwards. A similar kind of operation had been attempted but the incisions had not been sufficient. On the following day I performed the operation, which was one of extreme difficulty; it was executed by first introducing a bivalve speculum, getting a clear view of the opening, introducing a director upwards, and then slitting up the sinus. Two days afterwards I treated the lower part of the sinus in the same way, and then dressed it carefully with lint. Considerable bleeding followed these operations, but the wounds made began to heal rapidly, the discharge diminished, and in a fortnight this gentleman left for his home, from whence he wrote in a short time that he had perfectly and quickly recovered. I had some correspondence with the well-known and excellent surgeon who had first operated upon Captain C—, and who candidly admitted the difficulties of the case and his non-success, which was due, as I wrote him,

to the fact of his not having laid open the sinus in its entire length. I may mention that I saw the patient two years after the operation and that he remained perfectly well.

Sometimes the existence of the internal fistula if suspected is not easily ascertained. A lady was operated on by myself for fissure of the rectum. She had previously been operated upon by a surgeon of high character who had very properly told her she would have no return of the disease. For a time she was cured but her old symptoms returned, and on ascertaining the nature of the operation she had undergone and the name of the operator, I felt sure there must be something very unusual about the case, and accordingly I examined her with the greatest care, and without difficulty discovered a polypus at the upper end of the fissure. I at once concluded that this was the cause of the return of the ulcer, and I removed the growth at the same time that I divided the ulcer. Notwithstanding this operation the wound would not thoroughly heal, the old pain and discharge continued, and although I suspected there must be a fistula, it was not until after repeated examinations, and by the use of an anæsthetic, that I discovered an opening branching off at an oblique angle from the ulcer and running some distance side ways under the mucous membrane. I thoroughly laid this open, cut through the ulcer and external sphincter.

This case, together with others of a somewhat similar nature, illustrates the difficulty which may exist in reference to the diagnosis of an internal fistula when complicated with ulcer or fissure in the usual position.

Finally, I must say a few words regarding another class of cases of fistula which occurs, viz. those in which it is not prudent to perform any operation; not from any constitutional cause, but simply from the reason that the fistulous sinuses are of great extent, involving a considerable portion of the adjacent structures, and, besides, have existed for so many years that, even if it were expedient to open them up, it would be almost an impossibility to get them to heal. I have recently had two cases brought under my notice where I was obliged to decline any operation, although the patients were suffering great distress and annoyance.

In the one case the patient was a comparatively young man, but had seen a great deal of service as a naval officer in foreign climates. He had suffered from fistula for some years before I was called to him, and when examined it was found that the fistulous sinus communicated at one extremity with the rectum above a tight stricture, and that the other end of the tract actually extended half way down the thigh; here it would have been absurd to attempt any operation on the fistula, so I contented myself with dividing the stricture, which gave great relief.

In the other case, a gentleman between fifty and sixty, had suffered from fistula for many years, and had seen various surgeons. I was requested to see him, and on examination both the buttocks were found to be in a most extraordinary state, riddled as it were with sinuses leading into the rectum, and pouring forth a profuse discharge; any operation here would of necessity be of great magnitude, and I therefore strongly advised the patient to remain as he was. These cases are fortunately rare, but we see them sufficiently often to indicate to us the necessity of not delaying the proper treatment of cases of fistula; for when it is undertaken in proper cases, no operation is, as a rule, more successful or satisfactory than this is.

It is incumbent upon me to say a few words on a very important point in connection with the operation for fistula, viz. as to what should be done when conjoined with this local malady there is evidence of tubercular disease of the lungs. My own observation teaches me that, as a rule, an operation is far better avoided in such cases. If the disease in the lung be at all extensive we may almost with certainty predict that the wound made by the surgeon will not heal, although there are notable exceptions to this; and if the disease be slighter the wound may heal, but I think that when the discharge from the fistula is arrested the disease in the lung becomes accelerated. When, however, the

pulmonary mischief is only very slight and the local disease is severe and harassing to the patient, an operation may be undertaken and it will give great relief. In one instance where there was extensive fistula and severe pulmonary disease I operated with the effect of healing up the large wound, but in this case the patient, who had long suffered from chronic phthisis, kept up a discharge by wearing a pea issue in his arm.

Since the publication of the former editions, the use of the elastic ligature has been introduced into surgery, and it has been tried in certain instances of fistula with success. Mr Allingham has published several cases where this treatment was adopted. It is an advisable proceeding in certain cases where a patient will not submit to the use of the knife or where he cannot lie up, but of course in anything like severe or complicated cases such a mode of treatment will not be applicable.

LECTURE II

ON STRICTURE, CANCER, AND POLYPUS OF THE RECTUM

In the present Lecture I propose making some observations on stricture, and on malignant disease of the rectum, and concluding with the details of some cases of polypus. I have already referred at some length to the subject of stricture of the lower bowel as a complication of fistula in ano, and have endeavoured to impress upon your minds the importance of making a careful examination with the view of ascertaining whether the presence of a stricture be not the cause of failure after the operation for fistula; but I shall now consider the affection by itself, make a few remarks upon its pathology, and briefly discuss the most efficient means of treating the disease.

You are probably aware that some years since, stricture of the rectum was considered to be a most common complaint, and a practitioner of large experience in rectum surgery was said to have made large sums of money by the successful treatment of the numerous cases which came under his care. It was

considered by many that stricture of the rectum was not quite so common as was stated to be by the gentleman in question; nevertheless, the public, so easily led, or rather misled, in such matters, were induced to believe that a vast number of the ills which flesh is heir to were due to the existence of a contracted rectum; and possibly you may have heard of the funny story regarding the husband of a lady who had called upon this well-known rectum doctor, and had been operated upon by the bougie for the supposed disease. Infuriated at the liberty which had been taken with his wife, he called at the house of the practitioner with a horsewhip in his hand, intending to punish him for his treatment of his wife; but the story goes on to say that the interview terminated, not by the committal of the intended assault, but by the peaceful submission of the husband himself to the introduction of a rectum bougie on his own person; such was the influence of the surgeon in question in persuading his patients to believe that they suffered from stricture of the rectum.

It is impossible, however, for any careful surgeon to fail observing the not unfrequent occurrence of stricture of the rectum amongst the patients of our hospitals and dispensaries. I believe that the disease is met with much more frequently amongst the poor than amongst the better classes; I believe that this is partly accounted for by the undoubted fact

that stricture of the lower portion of the gut is not uncommonly associated with, if not directly caused by, syphilitic ulceration of the parts in the neighbourhood. It has so often occurred to me to notice this affection in connection with the later manifestations of constitutional syphilis, that I am strongly impressed with the view that stricture of the rectum is produced either directly by the specific ulceration in the part affected, or by contact of the discharge from the surrounding parts.

Scarcely any writers on the subject have alluded to this as a cause of stricture, with the exception, perhaps, of Mr Curling, who refers to it, and alludes to a well-marked case mentioned by that very accurate observer, the late Mr Avery. This form of stricture is usually seated very low down, and in connection with it there are seen warty or condylomatous growths around the anus, and indeed these growths are so frequently associated with syphilitic stricture, that I have more than once formed my diagnosis accurately from this feature alone, before I had made the necessary examination with the finger. In my observations, too, this form of stricture is much more common in females than in males, and this we can readily understand if we at once admit as a cause the presence of venereal ulcerations and discharges.

It is extremely important to recognise the syphilitic poison as a cause of the disease; otherwise we

shall be led into the error of limiting our treatment to local measures alone, whereas constitutional treatment for the specific affection originally causing the stricture must be employed at the same time. Fortunately in these cases, as I have before stated, the stricture is met with low down, generally within an inch or less from the anus, and therefore there is no objection to a pretty free use of the knife prior to the employment of the bougies; and if proper precautions be taken, these cases generally terminate very satisfactorily. In employing the bougie here, after the necessary incisions, I am in the habit of recommending that it should be well smeared with the strong mercurial ointment; benefit is derived partly from the local use of the mercury and from its constitutional effect, as we know that it is pretty readily absorbed into the system by the rectum. The following is a good illustration of what I may term syphilitic stricture of the rectum:

Mrs R—, aged forty-two, a respectable married woman, applied to me with the following history:— Eight years previously she had contracted from her husband a sore on the vulva as large as a shilling, and which did not heal for twelve months. Soon after this had healed she noticed sores about the anus, and pain in passing her motions; it was not, however, until two years after this that she noticed any obstruction to the contents of the bowel. This difficulty, however, gradually increased, and now she

passes nothing but very small portions of fæcal matter, and these with extreme pain and difficulty. She is pretty comfortable so long as she takes medicine, but if she neglects it she gets troublesome diarrhœa; there is always a discharge of matter from the bowel before she evacuates its contents. During the last five years she has repeatedly suffered from synovitis of the knee-joint, which has speedily yielded to iodide of potassium, but no other secondary symptoms of syphilis have presented. On examination I found the anus surrounded by several distinct ulcerations, such as we see accompanying the other manifestations of constitutional syphilis, and on introducing the finger it is arrested at an inch from the anus by a firm stricture, which just allows of its point to be inserted. I contented myself in this case with simply passing bougies from time to time through the contracted rectum, as the stricture pretty readily dilated without the previous use of the knife; and in a short time she was enabled to evacuate her bowels easily.

Sometimes a case—and I generally find it is in the person of a female—presents itself to our notice, where the most prominent symptom is severe pain, and on examination an ulcer of considerable size is seen, involving the external sphincter and lower portion of the gut; and it is very likely that we should overlook the real condition of things without a very careful examination. In connection with this

peculiar ulceration, which I believe generally to be of a syphilitic nature, a stricture of the gut not unfrequently exists, and prior to any treatment of a specific nature being adopted, the stricture should be dilated either by incision or by bougie, and then the painful ulceration will heal. Sometimes this ulceration is the only manifestation of a syphilitic character, but in other cases there are or have been very clear symptoms of the constitutional disorder. In another case where a respectable married woman applied to me, the history of syphilis was very clear, there being a sore, with much discharge from the vagina, and not healing for six months. A year afterwards the symptoms of stricture gradually showed themselves, and some time after this she suffered most severely from a copious eruption on the skin, and from syphilitic synovitis.

I need not say how important it is when cases are so clearly revealed to us, and so unmistakeably showing their origin, that we should combine with the local treatment those general remedies which we know exert a specific influence upon the system when contaminated by the venereal poison.

Although, in the majority of cases, a stricture of the rectum is met with very near the anus, and in many of these I believe their origin to be syphilitic, the disease is not unfrequently met with higher up, and situated at a distance of two to three inches from the anus; moreover, it is more rarely, but still

occasionally, found at the upper part of the rectum, close upon the sigmoid flexure of the colon. In some of the former class of cases the disease is complicated by its involving a considerable extent of the bowel—say from one to two inches of its length—there may be also, along with this condition, enormous thickening of the coats of the bowel at the site of the stricture, and a dilatation and softening of the tissues above it. It is in some of these cases that we meet with great difficulty in the necessary treatment; for if the disease has been of long standing, has involved a great extent of the bowel, and there is much condensation of the tissues at the site of the stricture, the use of the bougie alone will result in little benefit, and the employment of the knife is attended with danger. It will be necessary, in order to produce any decidedly beneficial result, to incise the whole length of the stricture, and the mucous membrane above it may be in such an unhealthy condition, that without the greatest possible care the knife may easily be made to penetrate the coats of the bowel and thus produce fatal mischief. I have strong reasons for believing that a mistake of this kind occurred in one of my patients in King's College Hospital. The case was that of a woman who had suffered a long time very severely from stricture of the bowel, which was situated high up but within reach of the finger: it was so dense, and there was so much of the gut in-

volved, that I determined to divide it; this I did by very carefully nicking the sides of the stricture on each side until I could introduce a fair-sized bougie. Two days afterwards this patient became attacked with pain in the iliac region and symptoms of low peritonitis, which lasted for ten days and terminated in death. On post-mortem examination we found that there was evidence of extensive mischief in the neighbourhood of the disease, suppuration and infiltration of the cellular tissue, and on cleansing the parts a large opening above the strictured portion was visible; the mucous membrane generally being much softened and thinned. There was enormous thickening and induration of the coats of the intestine around the contracted portion, and to the naked eye it looked as though the deposit was of a malignant character, but on microscopical examination it was found to be simply fibrous deposit. It was impossible to say whether I had penetrated the coats of the bowel with the knife or not; but even if the opening was merely the result of ulceration, the parts were in such a condition as showed how readily the bowel may be penetrated in similar cases on the use of the least force.

I think it more prudent in a case of this kind, especially if the stricture be within reach of the finger, to place the patient under the influence of chloroform, and dilate the contracted portion by a somewhat forcible use of the finger, or if that

cannot be effected, we must content ourselves with nicking the lower portion of the stricture, and then using the bougie; but although there is a great temptation to do so, it is more prudent not to carry the knife over the whole extent of the contraction.

Even this careful mode of treatment may be followed by fatal results, as lately occurred in my practice. A middle-aged lady had long suffered from stricture of the rectum, somewhat high up. She had been ill a long time and had got into bad health; some ulcerations had occurred in connection with the stricture as evidenced by a free purulent discharge. When chloroform was given I performed a careful operation by forcibly dilating the stricture with the finger and then passing a bougie through the stricture. I found the parts in a very unhealthy condition. A few days after this proceeding she was seized with a rigor and other symptoms of blood-poisoning, and gradually sank a fortnight after the operation. This case shows the possible danger of meddling with those instances of stricture which are associated with destruction of tissue in the immediate neighbourhood.

Of course these remarks do not apply to the treatment of stricture of the rectum when it is situated low down, and when the thickening and contraction is limited; in such cases the knife may be used pretty freely without much fear of producing mischief, and

the bougie will afterwards be employed with great benefit.

Since writing the above I have met with a most striking instance of the good results of this operation in a most difficult case.

I was called by Dr Vine to see a military officer, aged 40, who had returned from India in the most miserable plight. He had suffered for several years from chronic diarrhœa, and had not got relief from any measures; and six months previously he had been recommended by a medical board to go by sea to England. On his arrival at Southampton, on his way to Edinburgh, his native town, he was so ill that he determined to stop in London, and when he arrived there he sent for Dr Vine, who, on hearing his history, at once suspected something wrong with his rectum, and making an examination, found an obstruction. I was requested to see him, and I found the patient exactly in the condition of one suffering from strangulated hernia; he was constantly vomiting, complaining of pain, and the countenance was anxious, and he was much emaciated; the abdomen was immensely distended, and it was clear that if some relief were not soon given, this gentleman would die.

In conjunction with Dr Vine I made a most careful examination, and I found on introducing the finger into the bowel as far as possible, that it met with an obstruction, and after some time I discovered what

appeared to be the opening or the stricture, more like a dimple than aught else. I was enabled to introduce through this a No. 10 gum elastic catheter, and through this instrument some fæcal matter and air came. I was thus made to see that I had got beyond the stricture.

On the following day the patient was placed under chloroform, and I guided a long straight probe-pointed knife very carefully along the side of my left index finger, and fortunately got its point into the orifice of the stricture. I nicked this on either side, and then got the point of my finger into the obstruction, and dilated the orifice as much as I could, whereupon an enormous quantity of fæcal matter was emitted, deluging the bed, and placing myself and my assistants in a most unenviable position. The abdomen became quite flat, and the patient was at once immediately relieved. No bad result followed this operation; in three days we commenced dilatation by bougies, and I was soon enabled to pass a full-sized rectum bougie through the stricture. In a fortnight I took my leave of the patient, recommending Dr Vine to pass the bougie daily. I heard a few weeks afterwards that the patient had gone to Edinburgh convalescent, and able to introduce the bougie for himself.

This very interesting and successful case illustrates the kind of treatment which should be adopted, when the stricture, however tight, is within reach

of the knife. I was not quite sure, before the patient was prepared for the operation, whether I would be able to divide the stricture with safety, so high up was it, and, indeed, I had determined to perform Amussat's operation, if I could not have given relief per anum, so severe and dangerous were the symptoms; fortunately, this was not required.

The case also shows the necessity of making an examination of the rectum when diarrhœa has persisted for many months or years, and has resisted all remedial measures. It appears that this step had never been adopted before Dr Vine, luckily for the patient, was called to him. What a deal of misery and suffering this precautionary and simple measure would have prevented!

I have recently met with three cases where there was a tight stricture of the intestine at the upper part of the rectum, close upon the sigmoid flexure of the colon, and they were all of considerable interest, insomuch as it was a question whether some severe operative measure should not be adopted in each case.

The first case was a patient in King's College Hospital, a female, between thirty and forty; she had suffered for two or three years from symptoms, more or less severe, of obstructed action of the bowels, and had been in the hospital previously for a severe attack. When she came under my care the symptoms were very severe; there was an impossi-

bility to pass anything except by strong purgatives, or enemata thrown very far up. On examination with the finger as far as it would reach, the gut was in a normal condition, but on passing a small elastic bougie, an obstruction was met with at about eight inches; with great care this was overcome, and it was found possible to introduce a long flexible tube through the obstruction, and thus evacuate the contents of the large intestine; by this means, and by introducing a small bougie every other day, the patient got great relief for a time, but the symptoms of obstruction became aggravated, there was great tension of the abdomen, sickness, and loss of strength, and I prepared myself to perform Amussat's operation; but on the day I proposed to adopt this measure we were enabled to throw up a large quantity of water beyond the stricture, and the symptoms subsided. After this we gradually increased the size of the bougie, and the patient left the hospital in a few weeks, able to evacuate the bowels much more easily. I saw her some months afterwards, when she continued in very fair health; doubtless, however, in course of time the contraction will return, and I think it very likely that ultimately the operation I contemplated will have to be adopted.

The next case was a private patient, aged forty-five, who had suffered from complete obstruction of the bowels for six days, and I was called in to perform the operation of opening the abdomen, it

being thought by the physician in attendance, that there was some band of adhesion obstructing the intestine; the symptoms certainly pointed to the neighbourhood of the cæcum as the seat of obstruction, and as everything had been done which possibly could be carried out but an operation, I consented to explore the abdominal cavity. I may mention that a long tube had been passed up the rectum, and no obstruction was met with there; and to justify our proceeding, it may be stated that on the right side, over the cæcum and ascending colon, the distension of the intestine was remarkable—as though the obstruction lay just above the latter part. I pointed out the serious and uncertain nature of the operation, but the patient, a remarkably cool and intelligent man, eagerly caught at the least chance. I therefore did the operation, exploring the abdomen carefully, and more especially examining the right side, and taking out a considerable portion of intestine. I could not, however, find any obstruction, and it really appeared as though the case would turn out as one merely of atony of the intestines. Extraordinary to relate, the patient seemed very much better after this severe operation, was enabled to take nourishment, and suffered less pain, but death occurred somewhat rapidly on the fifth day. On post-mortem examination, we found that the cause of the obstruction was a close annular stricture of the bowel at the junction of the colon

and the rectum, and just above the stricture a perforation of the intestine had taken place.

Now, had we been able to diagnose accurately the seat of obstruction, we ought to have performed Amussat's operation, although possibly the pathological changes which led to perforation may have been going on before I was called in. A more careful examination may have led us to the real seat of obstruction, but still it is not always possible to diagnose stricture at this spot during life. Curiously enough, I met with just such another case, where a well-known surgeon performed the same operation under similar circumstances; there was the same difficulty in arriving at a correct diagnosis, and recollecting the case just mentioned I pointed out to the gentlemen engaged in the case, that the obstruction would be found at the junction of the colon and rectum, and there in reality it was found when the examination was made after death.

The third case which I will relate occurred lately; the patient was a lady, aged seventy, whom I was requested to see in consultation with her medical attendant. She had been suffering from obstruction of the bowels for four days, and it became a question as to whether anything might be done. The lady was much exhausted, the abdomen enormously swollen, and she was constantly vomiting. On examination per anum, I could not detect any obstruction, but I could feel a somewhat indurated

mass just in front of the upper part of the rectum. It was considered that the case was one where Amussat's operation should be performed, but the age of the patient, and her exhausted condition, forbade the idea. I made my diagnosis of the case as one where there was some mechanical obstruction of the upper part of the rectum. This lady died within twenty-four hours of the visit. On making the post-mortem examination, it was found that there was an obstruction at the sigmoid flexure of the colon and upper part of the rectum; it constituted a stricture of the gut through which the contents of the bowel could not pass, and it appeared to have been the result of some inflammatory adhesion between the bowel and uterus; it did not appear to have been of a malignant character. I did not make the post-mortem examination myself, but a well-known surgeon did, and he informed me that with some difficulty, by introducing the finger per anum, after death, he could just reach the stricture with its tip, and he was under the impression that during life the obstruction might have been divided; but I do not think that the use of the knife is at all advisable in cases of stricture seated so high up, and that far the best thing to have adopted here, had the patient been younger, was Amussat's operation.

Since writing the above I have met with two instances of simple stricture, where Amussat's operation was performed, but the obstruction in

each was just beyond the rectum, involving the sigmoid flexure. In this first case, which was one of peculiar interest, the patient was a gentleman, aged sixty, who had suffered with chronic partial obstruction of the bowels for several weeks, and acute obstruction for several days. I was associated in the treatment of this case with Dr Salter, Dr King Chambers and Mr Gay. We had no difficulty in coming to the conclusion that the obstruction was seated in the sigmoid flexure of the colon, and after repeated attempts to procure relief we determined upon opening the colon in the left loin. This was adopted by Mr Gay with success, as regards relieving the distended intestine, but the patient sank from exhaustion in forty-eight hours; and on post-mortem examination, a tight stricture resulting from the cicatrisation of an old ulcer was found in the sigmoid flexure.

The second case occurred in King's College Hospital, and was reported in the 'Lancet' of November 16th, 1867. The symptoms were very similar to the first case, and pointed so distinctly to the seat of stricture that I had no hesitation to recommend Amussat's operation, which was done by the house surgeon, Mr Trevor. Great relief was given, but the patient was old and exhausted, and lived only for a week. After death the obstruction was found to involve the sigmoid flexure.

In connection with this subject I must say a few

more words about Amussat's operation. During the last few years it has been abundantly shown that the operation is not only justifiable, but that it is likely to be attended with great benefit. I must, however, beg to state most emphatically that there should not be any delay when the indications for this proceeding are clear. It is true that in some cases there is so much obscurity that it is almost impossible to tell whether the obstruction be dependent or not upon organic stricture, or whether it be not the result of a concealed hernia or want of tone in the bowel, and in such a case it is very difficult for the surgeon to make up his mind as to the propriety of this operation, but every now and then we shall meet with an instance where, from a previous history and from certain indications, there can be no doubt as to the necessity of the measure, and when this be so the operation should be promptly undertaken if success is to be hoped for; whereas, the effect of vacillation and delay will be most disastrous. Clearly was this shown in an instance of the most favorable character to which I was called not long since.

A lady, about 35, who had been seized on a previous occasion with violent symptoms of obstruction which had been with difficulty overcome, was attacked in the same manner again. All attempts failed to relieve her, and I was requested to meet her medical attendant with a view to the question

of operation. I found the symptoms of obstruction in the descending colon very clear, and recommended the continuance of remedies for twenty-four hours further, and then if the symptoms did not yield urged the operation. In this juncture a homœopathic practitioner was called in who gave hopes that the obstruction would yield, and this poor lady was allowed to continue in her perilous state for a whole week after I first saw her, when I was again summoned. She was of course greatly exhausted, still I deemed it my duty to operate, and did so with the effect of relieving the loaded intestine, but the strength of the patient was so enfeebled by this most wicked delay that she died before two days. Of the various instances of obstruction of the bowels to which I have been called I never met with a case where the operation was more clearly indicated, or where there was a better chance, for the lady in question was young and spare. There could be no doubt that the obstruction was produced by simple stricture and, notwithstanding the delay, there was no evidence whatever of any inflammatory mischief having been produced.

The observations hitherto made have applied solely to that form of stricture which is of a simple character, and has been produced by some inflammatory deposit. As I have already shown, this affection is a very serious one, and if overlooked or not attended to, begets in time the most troublesome and even

fatal symptoms; but when the stricture of the gut is the result of malignant deposit in the coats of the intestine we see few cases which in their course and termination are attended with more distressing results; and, although I have little hope of being able to add anything to what is already known in reference to the relief of this disorder, still there are one or two points in connection with it, to which I will briefly allude.

There is, perhaps, scarcely any part of the body liable to be attacked by malignant disease where the disorder comes on so insidiously as in the rectum, and this is the reason why so many patients present themselves to us with cancer of the rectum, who have not the slightest notion that there is anything wrong with them beyond some irregularity of the action of the bowels, or some slight discharge which is considered to be of a hæmorrhoidal character. This is especially the case when the malignant deposit takes place some two or three inches from the anus; from some instances which have been submitted to my notice, and where the history has been correctly detailed, I have reason to believe that sometimes a patient may be going about with malignant disease of the rectum for years, with scarcely any symptom beyond a slight uneasiness and almost imperceptible wasting. It appears to me that one of the most important and interesting features connected with malignant deposit in the rectum relates

to its diagnosis in its early stages, and all who have had opportunities of seeing much of this disease must admit that this is often a point of great difficulty. Its importance, too, cannot be over-rated, for patients who suffer from disease in the rectum, which obstructs the contents of the bowel, are often most anxious to know our opinion as to whether the affection be of a malignant or simple character, and a vast amount of mental disquietude may be allayed by a correct appreciation of the morbid condition. In the very early stage of malignant disease, it is sometimes impossible to ascertain its diagnosis from a simple fibrous deposit; but, even then, if a very careful examination be made, and the diseased portion of bowel be well within reach of the finger, the peculiar hard irregular deposit arouses our suspicions, and to a practised hand, is different from the regular sharply defined induration which is the result of simple fibrous deposit.

There is very little else to guide us in our diagnosis until time goes on, and then, if the disease be malignant, the constitution will surely, although perhaps more slowly in this than in any other form of such disease, show some signs of its presence; these consisting of a slight wasting, loss of muscular energy, and that indescribable anxiety of countenance which attends almost every form of malignant disease, and which can scarcely be mistaken by the careful observer. I have recently met with three cases

where the symptoms were so slight and the disorder so tardy in its progress, that it was very difficult to come to a correct diagnosis; but in each the diagnosis was verified by the death of the patient in two cases, and the progress of the disease in the other. In the first of the three cases the disease occurred in a gentleman, aged sixty-two, who was troubled with what he called a prolapsus, and he sent for me to get it removed. On examination I found what was, or rather looked like, a small prolapsed portion of mucous membrane with a thickened base, which I was requested to remove, as the patient suffered very much from it; but there was an appearance of languor and anxiety about the face which arrested my attention, and I made a very careful examination with the finger, and about one inch and a half from the anus I felt a distinct but irregular induration around the gut, and forming a slight stricture. From the peculiar sensation imparted to the finger, although the deposit was very slight, I at once had strong suspicions that the affection was malignant, and refused to perform any operation. My patient was annoyed at this, and sent for a surgeon, who happened to be a great friend of mine, and who had no suspicion of its malignant character until I acquainted him with the result of my examination; the wisdom of my advice not to interfere was shown by the patient gradually getting worse, and dying within a year from the time I saw him.

In the second case, a gentleman, aged fifty, complained of a difficulty in passing the contents of the bowel, and some uneasiness. These symptoms had, however, been going on, more or less, for a period of twelve years, but had latterly become aggravated. On examination I discovered a thickening of the coats of the rectum within easy reach of the finger, and some stricture. This patient, who was a highly intelligent man, and whose life was a particularly valuable one, was most anxious to know whether it was of a malignant character. The history of the duration of the disease forbad this idea, and so I told him, but there was in this man's face that peculiar kind of expression before alluded to, and which, to my mind, so strongly pointed to some malignant affection, and I had strong suspicions that the disorder of the rectum was of this character, but still it was a difficult case to decide upon. Another opinion was obtained, and my view was pronounced to be the correct one, and it proved to be so, for ere long the disease increased and developed itself in the form of cancer, and not long after I saw in the paper the announcement of this gentleman's death.

In the third case, a healthy-looking country gentleman, the symptoms were but slight, and there was very little constitutional disturbance, and one would scarcely expect to find in such a patient one of the most terrible forms of cancer; but on careful examination the point of the finger detected the unmistak-

able hard, irregular mass of scirrhous deposit. The absence of severe symptoms in this case was due, in a great measure, to the fact of the deposit being at a considerable distance from the anus.

Now I am speaking of the symptoms which a malignant growth in the rectum produces, I will refer to one case of great importance, where there was not any symptom whatever but a chronic diarrhœa. I was called to see an old lady, in the country, who had been confined to her bed for some weeks with diarrhœa, for which all sorts of remedies had been used in vain. She was looking remarkably well, and there was no anxiety of countenance, or anything else, to indicate the presence of cancer. On examining the fæces which had been passed, I found them to consist of little more than muco-feculent fluid, and I at once asked the practitioner whether he had ever examined the rectum with the finger; he replied in the negative. Whereupon I introduced the finger, and high up I discovered a mass of scirrhous induration, almost entirely blocking up the passage. Here, then, was a case not quite unlike those instances of obstinate obstruction in the urethra, where the bladder has become overdistended for a long time, urine has been dribbling away, and the cause of this incontinence has, unfortunately, been entirely overlooked both by patient and medical attendants.

The case teaches us never to neglect an examina-

tion of the rectum with the finger or bougie in an instance of long-continued and uncontrollable diarrhœa. I may mention that this lady got rapidly worse, and died before many weeks, as remedies were of no service; but had the cause of those symptoms been detected, as they ought to have been, at an earlier period, a good deal of relief may have been given—the unfortunate woman, at least, would have been spared the infliction of taking gallons of nauseous medicine.

These remarks apply solely to malignant disease of the rectum when in its early stage; for when it has become advanced there ought to be no difficulty at all in the diagnosis. I was, however, called down in the country to see a patient of middle age who had been suffering for some months from what had been considered to be a prolapsus of the rectum. I was especially requested by the gentleman in attendance—and who was one of the most experienced and distinguished of our provincial surgeons—to see the case, and decide whether it was not a very fit instance for the application of strong nitric acid. When I came to examine the case I found that, although there was the appearance of prolapsus, the disease was in reality a well-marked example of protruding cancer of the rectum. There was the red, vascular, ulcerating surface of the growth, surrounded by a hard deposit, and in the interior of the rectum similar indurations were to

be felt. In this case there could not be any doubt as to the character of the disease, and I must confess I was very much astonished at the mistake in diagnosis which was made by a surgeon of great experience.

I have, however, met with two instances in my own immediate practice where there were great difficulties to be encountered in arriving at a correct diagnosis. In the one the disease of the rectum appeared in a healthy young man of twenty-three. The appearance and condition of the ulceration, surrounded as it was by a hard base, together with the history of syphilis, made me conclude that the symptoms were due to that disorder, and I treated him for it; but the ulceration would not heal up under the most powerful applications, and although the age and appearance of the patient forbad the idea of cancer, the gradual increase both in the ulceration and the density of the deposit around made me change my views, and impressed me with the idea that, after all, the disease might be of a malignant character.

In the second instance the difficulties in diagnosis were so great that the disease was entirely mistaken. It occurred in the person of a middle-aged clergyman who for some months had suffered from mischief about the anus. He had previous to seeing me consulted one of our most eminent syphilographers, who had pronounced the malady to be

syphilitic, much to the annoyance of the patient; as treatment was of no avail he saw me. There were several deposits around the orifice presenting exactly the appearance of mucous tubercles, but they were somewhat harder than usual; still, notwithstanding the firm denial by the patient that he had ever had syphilis, I could not help coming to the conclusion that the disease was of this nature, and I placed him under treatment by large doses of iodide of potassium. In a fortnight he called again, and to my surprise I found no alteration whatever in the disease; still, I thought that it was syphilis and urged him to go on with the remedy in larger doses. I did not see this patient again, but I heard some time afterwards from his medical attendant that he was dying of malignant disease, and was then informed that he had consulted one of our most eminent surgeons, who did not give any decided opinion on the case, but informed the patient that he "hoped it was syphilitic but could not be certain." I doubt not, if I could have seen the patient a third time and had been able to notice the utter failure of the specific remedy, I would have been able to come to a correct conclusion, and recognise the disorder as malignant.

In most cases of cancer the deposit increases, involves the lower portion of the gut, and protrudes at the anus, producing extreme suffering, which few of our remedies can allay. It will happen sometimes,

however, that an exception to this tendency of the disease to extend downwards and outwards exists; and a somewhat curious case of this kind occurred to me some time since. A middle-aged gentleman was sent to me by the late Mr Ticehurst, of Hastings, for my opinion regarding the state of his rectum. He had well-marked symptoms of malignant disease, and on examination a cancerous mass was found within easy reach of the finger. He suffered greatly, both locally and generally. I ordered some appropriate treatment, and supposed that the disease would rapidly extend downwards, and involve the anus as is usual. Two months afterwards I had a letter from Mr Ticehurst, to say that this gentleman had died the day before. And to quote his words, "After his return the disease in the rectum scarcely troubled him at all; he had *good-sized* motions until the last: but about a month ago his abdomen became hard, and I could discover several tumours in the belly. He had a large number of scirrhous tumours on the chest, armpit, and outside the abdomen, of various sizes, from that of a pea to that of a nut. His abdomen rapidly increased in size. I quite expected that the disease would have appeared at the anus; but it seemed to grow up like a mass of mushrooms into the abdomen."

This case illustrates the observation which has been made by most writers on the subject: that where this disease is confined to the upper part of

the rectum the suffering is comparatively slight; but that when the affection has involved the lower part and the anus itself, the suffering produced is very distressing.

I may here very appropriately relate a case which illustrates, in a remarkable manner, the truth that a patient may be affected with a cancerous deposit in the rectum to a considerable extent, and yet, when it is situated away from the anus, the suffering may be so slight as to cause no suspicion as to the real state of things. The case also shows another fact, viz. that in some instances the disease may have existed for some time without producing any decided effect upon the system at large. A man aged sixty-two, but looking considerably younger, and having a healthy appearance, came to see me at the hospital. He complained of difficulty in evacuating his bowels, and constant passing of flatus, but scarcely any pain or discharge. There was no appearance of anything wrong externally, but on introducing the finger into the rectum its point came into contact with a large, hard, scirrhous deposit, through the centre of which I could with difficulty insert the finger, and I then found that the gut was involved in the disease for about an inch and a half. There was scarcely any pain produced by the insertion of the finger, or by the subsequent introduction of a bougie. The lower two inches of the gut were perfectly healthy, and thus was accounted for the almost entire

freedom from pain. I pointed out to the pupils how strongly the case illustrated the fact of there being so little suffering when the malignant deposit was seated some inches away from the anal orifice, and how important it was to make a careful examination of the rectum with the finger in these insidious cases.

With regard to the treatment of cancer of the rectum, there is little which can be offered here which is not generally known; but there is one point on which I would say a word or two, and this relates to the employment of bougies for the purpose of dilating the rectum obstructed by cancerous deposit. I am aware that most writers object to any mechanical means of remedying the symptoms produced by this disorder, and, as a rule, the advice is sound; but every now and then a case is met with where the obstruction to the passage of the contents of the intestine is very marked, and where ulceration has not yet taken place on the surface of the cancerous mass. Now, in such an instance as this, and more especially if the disease be within easy reach of the finger, there is no possible objection to the cautious use of a wax bougie, and I have seen great comfort produced by the treatment. If, however, the symptoms—such as severe pain, and a constant discharge of sanio-purulent matter—show that ulceration has attacked the part, it is useless and even hurtful to introduce the bougie;

and, indeed, the less interference, even with the finger, the better.

Although there is no hope of a cure in these cases of malignant disease of the rectum, a great deal may be done with a view to relieve the sufferings of the patient and prolong his life. One great object is to prevent any accumulation in the large intestine above the stricture, and to nourish the patient with the least trouble to his digestive and excretory organs. I find that a great many of the patients affected with intestinal cancer have been in the habit of taking considerable quantities of vegetables and other farinaceous food, with the idea that the bowels will be more readily acted upon, and under the mistaken notion that animal food will not be so readily got rid of. I find that in many such cases even their medical attendants have encouraged this mode of diet.

It is important, however, to remember that a large proportion of farinaceous material remains undigested or fails to nourish the body, and thus more readily loads the bowel and produces distension, flatulence, and diarrhœa. Whereas well cooked and plain meats, soups, milk, and eggs are more readily digested, and leave comparatively little refuse behind. I therefore am in the habit of laying down very strict injunctions regarding the diet, and patients generally find a considerable benefit by confining themselves mainly to these articles of food, taking

very little vegetable, no bread, except in the form of toast and biscuit.

We cannot fail to notice the comparative freedom from suffering which will result from very careful attention to diet, and equally surprising is the fact that persons afflicted with cancer of the bowel will live for years in more or less comfort. This is especially the case if the sufferers are at all advanced in life, and the contrary state of things occurs when the patients are comparatively young, say, below the age of forty.

If ulceration of the malignant deposit should have occurred, as will be shown by attacks of pain and bleeding, I find that the use of an injection of one or two grains of sulphate of copper in an ounce of water, with a few minims of laudanum, will check the hæmorrhage and delay the ulcerative process.

It has recently been recommended that the operation of opening the intestine above the seat of the disease should be adopted, not merely for the relief of the fatal symptoms which ensue from complete obstruction of the bowels by the cancerous deposit, but as a means of combating those distressing, but not necessary fatal, sequelæ of this disease, such as extreme difficulty in evacuating the bowels, harassing and irritating diarrhœa, and violent pain—symptoms, indeed, which sooner or later lead to death, but which do not of necessity demand an operation. Mr Erichsen and Mr Curling have strongly urged

this course of action in such cases as a means of temporary relief, and I must warmly support these views; and I shall not hesitate in the first suitable case which comes under my care attempting to give the relief which most certainly may be better afforded by Amussat's operation than by any other means.

I recommended Amussat's operation, in a bad case of malignant stricture of the rectum, as a means of temporary relief, in a man in King's College Hospital, soon after this Lecture was delivered. The operation was performed by our house-surgeon, Mr Royes Bell, and the patient got very great relief from his sufferings during the few days that his life was prolonged.

In the former editions of this work I had expressed myself as strongly opposed to the practice of removing a portion of the rectum involved in cancerous disease, and I am still of opinion that this operation is full of danger to life and only justifiable under certain circumstances. When the patient is suffering very severely from the local disorder, and is not too much exhausted to undergo the operation, and when the disease is so limited to the lower part of the bowel that the finger can be easily passed beyond it into healthy structure, and the tissues around are not much infiltrated, the surgeon is justified in excising the growth, but he must be prepared for serious eventualities both during the operation and afterwards. I have only met with two instances

where I thought I was justified in performing an operation of this kind. In the one case the patient made a good recovery. She was a woman of middle age, whose case had been thought to be syphilitic. The growth involved the lower two inches of the bowel, was hard and circumscribed; the finger could be passed well beyond it into healthy structure. The disease had involved the anal orifice and produced such a tight contraction that it was impossible to introduce the finger except whilst she was under the influence of chloroform. I performed the operation in the following manner:—The patient was placed in lithotomy position and was held very steadily. Seated in front of her I introduced my left forefinger into the bowel as far as the tip of the coccyx. I then passed a sharp curved bistoury along the finger to this point, and brought it out behind, and thus splitting the anus. With a straight bistoury I next made a semicircular incision on either side, about half an inch from the bowel, carrying it forward to meet in front; the bowel was then rapidly separated on each side and most carefully dissected off, partly by the point and partly by the handle of the knife, from the wall of the vagina, which was not implicated in the disease and luckily not injured in the operation. I then completely separated the bowel, partly by the knife and partly by the serrated cautery. Although I was assisted in the ablest manner and the operation was effected as quickly as

possible under the circumstances, the hæmorrhage was very severe, and it was needful to tie several vessels. The patient was removed in a very collapsed condition and remained so for some hours, but she soon rallied and had not a bad symptom of any kind. I kept the bowels confined by opium and strict dieting for several days, and she suffered but little from any local pain. The wound gradually healed up, she gained power over the bowel, and when she left the hospital was in good health.

In the second case the result was anything but encouraging. The patient was a man about fifty, who was under my care at King's College Hospital. Mr Rose had examined the case before I saw it, and considered it to be a fit case for operation. The disease appeared to be confined mainly to one aspect of the bowel, and I could just manage to get the finger beyond it, and the neighbouring parts were not involved. I performed the operation much in the same manner as described. A catheter was first passed into the bladder and the urethra held well out of the way; very severe bleeding took place and the patient was a good deal collapsed, but he soon rallied.

On the third day he got an anxious countenance and vomited much; there was also tenderness of the abdomen. He died five days after the operation. I was afraid that I had wounded the peritoneum, as the disease was much higher up than in the last

case, but on post-mortem examination it was found that the peritoneum had not been interfered with, and the symptoms of peritonitis were but very slight. The man appears to have died more from shock after the operation than any distinct mischief. The loss of blood in the operation was great, but he had well rallied from this.

Mr Harrison Cripps, in his very admirable and practical essay on 'Cancer of the Rectum,' which obtained the Jacksonian Prize, has entered very fully into the subject of excision of the rectum involved in cancer, and the profession is much indebted to him for the manner in which he has handled this somewhat difficult and unsatisfactory subject.

My own feeling with regard to the question of operating in cancer is that the surgeon should avoid such a proceeding unless he is able to extirpate the entire disease without materially risking the life of the patient, for even in the most favorable cases we may only reasonably expect that the disease will return in the course of a few months, or at the most in a few years.

Mr Cripps has very fully and carefully described the method of operation which he employs and which is much like that which I have given above. In his published work he states that he effected the final separation of the bowel by means of the écraseur, but in conversation with Mr Cripps lately he has informed me that he employs the knife throughout

the entire operation, as being most effective and rapid. This is entirely in accordance with my own views and practice, and I am glad to find myself supported by such an excellent authority.

The subject of polypus of the rectum has not had so much attention paid to it as its deserves. As an illustration of this I may mention that in one of our well-known treatises on diseases of the rectum, comprising upwards of 400 pages, five out of these pages only are devoted to the consideration of polypus. My predecessor in office, Mr Bryant, however, did in this room bring the subject very prominently under our notice, in a most excellent and practical paper, and he showed that polypus of the rectum is a disease of much more frequent occurrence than it is supposed to be. It is one also which causes a remarkable degree of annoyance and distress, and unless a very careful examination be made, both of the patient's symptoms and of the seat of the disease, the real nature of the affection escapes observation. I am quite convinced of the truth of Mr Bryant's remarks respecting the frequency of polypus. It has occurred to me to meet with a large number of cases, some of them of a very curious nature, and where, too, there had not been any suspicion of the true condition of things. In children the small, red, vascular polypus is chiefly met with, and, as a considerable amount of oozing of blood is produced, either after the bowels

have acted or when the patient runs about, the diagnosis of the affection is generally easy; and the treatment, which consists in ligaturing the pedicle, or tearing the tumour away with the fingers or forceps, always satisfactory. In adult persons, however, the diagnosis is not so easy, and, as I have before stated, the real nature of the affection is overlooked, for the polypoid growths are seldom of the same vascular variety which are met with in children, and sometimes they are situated so high up in the rectum as to escape observation entirely, only producing annoyance when the bowels are acted upon. Not unfrequently a polypoid growth is associated with a prolapsus of the rectum, and then a vast amount of suffering will be produced by the growth getting nipped within the grasp of the sphincter, whilst the prolapsed portion of the gut is either entirely or partially protruded; the annoyance caused is extreme, and that it is the polypus and not the prolapsus which is the seat of the suffering is rendered evident by the result of removing the tumour without, at the same time, doing anything to remedy the prolapsus, for the pain and irritation almost immediately cease so soon as the offending body is removed. The easiest and most satisfactory way of removing the small fleshy polypi which are seen in adults is simply to snip them across with a pair of scissors; but every now and then they present a more vascular appearance,

and in that case it is better to apply a ligature around the base of the tumour, and either allow it to separate, or immediately remove it with scissors. In one such case I did divide the base of the tumour without previously using any ligature, and the bleeding was so smart afterwards that I was compelled to seek for the cut surface and place a ligature around it.

The anatomical character of the bleeding polypi in children is well illustrated by a case which was recently under my care at King's College Hospital; the symptoms also of this affection are well shown by this case. A boy had suffered for a long time from hæmorrhage from the bowel each time that an action took place, without pain or other symptom. On examination I detected a polypus situated within reach of the finger. The patient was kept in bed for some days, and during this time no bleeding occurred. I removed the polypus, which was about the size of a raspberry and very florid, with the clamp and cautery. Mr Barrow examined the growth under the microscope and found it to be simply adenoma and very vascular.

In instances of polypi met with in adults the symptoms are not attended with hæmorrhage, as in the case of young persons; they produce irritation, a sense of weight, and of the presence of a foreign body, and not unfrequently the peculiar pain attendant upon the existence of an ulcer. And on

examination an ulcer will be found not always posteriorly, but in the anterior portion of the bowel, and when this is seen a polypus should be suspected. In such a case I doubt not that the continued irritation of the foreign body not only produces the ulcer but prevents it from healing. In two such cases recently operated on by me the structure of the tumour was fibrous with hypertrophy of the papillæ; there was not any bleeding in either case.

Every now and then we meet with a large, firm, fleshy polypus of the rectum, and it is seated so high up that it is extremely difficult to diagnose the nature of the complaint; or there may be more than one of these polypi, and they may be so situated as to escape observation for a time, unless a most careful examination be made; and this is especially the case if some more painful affection of the rectum be associated with it. I shall conclude my observations by relating two very interesting cases which occurred in my practice, and which sufficiently illustrate what I have just stated.

The first case is one where there was extreme difficulty in coming to a correct conclusion as to its real nature, and it occurred in the practice of the late Mr Beaman, who called me in to see a middle-aged lady, in April, 1860. She had been suffering for months, complaining of a protrusion at the time she evacuated her bowels, and a severe pain lasting some time afterwards. On examination I found a

large external pile. I removed this, with great relief to her sufferings; but in the course of a few weeks I was requested to see her again, and I then found her complaining of her old symptoms as much as before. I carefully examined the rectum with the finger, but could not detect anything in the shape of a tumour; but the introduction produced the intense agony which is noticed in cases of the painful ulcer. Moreover, there was a slight crack or fissure posteriorly. Thinking that this latter might be the cause of all her symptoms, I recommended that it should be divided, and accordingly I ran my knife through the fissure; to our mortification, however, there was not the least alleviation of her symptoms, and I was quite at a loss to account for them, until, one day, we fortunately went into the house immediately after the bowels had been violently moved by a drastic purgative. The lady was complaining of intense pain, and on examining her there protruded at the anus what, at first, I supposed to be an ordinary prolapsus, but on introducing the finger I found that I could pass it freely between the tumour and the wall of the gut, and on closer investigation it turned out to be a large fleshy polypus, but attached so high up by a long pedicle to the posterior wall of the rectum, that the difficulty in coming to a direct diagnosis of this harassing case was at once explained. Fortunately I had the necessary instruments about me, and

without delay I transfixed the tumour, got it well down, and after a deal of trouble was enabled to get a double ligature high up around the base of the pedicle. These separated on the fifth day and the patient soon got well.

Now, the case, which gave me a great deal of annoyance at the time, appears to me one of great practical interest, as it shows how difficult it may be to ascertain the existence of a polypus of the rectum when it is seated very high up, for I had made very careful examinations, and on one occasion the bowels had been well emptied by an enema beforehand, so that I could not attach any blame to myself. Moreover, the presence of a large external pile, and of a fissure of the anus, warranted the conclusion that the severe symptoms might depend upon these morbid conditions. Curiously enough Mr Curling mentions, in his work, a very instructive case, where there was an equal, if not a greater difficulty experienced by himself in detecting a vascular polypus in a young girl. Several examinations were made without anything being discovered, until, one day, Mr Curling took the opportunity of examining the patient immediately after the bowels had been acted upon by medicine, when, as in my case, the polypus was seen protruding at the anus, and having a long narrow pedicle. This was treated in a similar manner, and the patient soon got well.

The other case which I shall mention is an example

of multiple polypi, and illustrates the occasional difficulties there may be in detecting these tumours, especially when they are complicated with other disorders.

The patient was a young married lady, whom I saw in consultation with Dr Battershal Gill. She had been suffering very severely for some time from acute pain after evacuating her bowels, and a great deal of annoyance at other times. On making an examination I found several large excrescences around the anus, and at the posterior verge was an ulcer; and, on introducing the finger—a process causing most intense agony—I ascertained the presence of a foreign body. She was next day placed under the influence of chloroform, and an operation of a somewhat complicated character was performed. In the first place, the external tumours were removed; then the sphincter was cut through in the site of the ulcer, and two large fleshy polypi, which were pretty easily brought down, were tied and removed. After such a severe business it was hoped that the patient would be entirely rid of all her sufferings; and to a certain extent she was relieved; for she lost that severe and peculiar pain which is the characteristic of the painful ulcer, and I took my leave in a fortnight. At the end of three months Dr Gill requested me to see his patient again; and to my surprise I found that she had never been quite free from the symptoms of a sense

of protrusion, and that latterly they had increased so much as to convince her that there must be some other growth. I therefore made the most careful and thorough examination, and on introducing my finger very far up, I was enabled to detect a large fleshy polypus. I came prepared to adopt any measure which might be needful, and with some difficulty I seized the tumour and removed it, first placing a ligature around its base.

The patient in this case believed, fortunately for me, that the tumour had grown since the date of the first operation; but I feel sure that the polypus must have been there at the time I removed the others, only being seated high up in the rectum it was completely obscured by them. Moreover, I never dreamed of finding more than two large polypoid growths in the same person. Equally with the other case, this latter teaches the necessity of making the most thorough and cautious examination of the rectum in all cases where there is a suspicion of polypus, and of avoiding being misled by the presence of a morbid condition which in reality is only the result of the irritation produced by the descent of the foreign body, but which produces symptoms much more annoying and painful than those caused by the original malady.

Since these observations regarding polypi of the rectum were made, it has occurred to me to meet with a great number of instances where these growths

have existed, and I have come to the conclusion that perhaps next to hæmorrhoidal disease these polypoid excrescences, in some shape or another, are as frequently met with in the rectum as any other morbid condition of this part. It very often occurs by itself in the form of a single or multiple growth, varying from the size of a grape to that of a cricket-ball, and it is as often seen associated with other disorders of the rectum not unfrequently there. Polypi are superadded to hæmorrhoids, and it is found that the chief annoyance and suffering are produced not so much by them as by the polypoid growths. A very striking instance of this occurred to me as I am now writing. A young lady, who had endured much misery for years, was compelled to speak to her medical attendant about her complaint. I was referred to, and I found a large mass of disease, consisting of internal hæmorrhoids and external, but by far the largest part of the tumour consisted of two large polypi, which were attached to the rectum just above the external sphincter, so that they were either constantly protruding partially, or were either wholly outside, and grasped by the sphincter ani, and thus productive of immense suffering. I removed the polypi and the hæmorrhoidal disease at the same time, using the clamp and cautery; they consisted, as most of them do, of a dense fibrous structure.

I have recently been consulted as to the advisability

of removing a polypoid tumour the size of an egg, growing from the anterior wall of the rectum, and only just within reach of the finger; and I saw the late Sir William Fergusson remove a mass of the size of a man's fist, which had been growing from the rectum low down, and which had caused serious bleeding and discharge. It was a large fleshy mass, and so circumscribed and attached by a distinct pedicle that it was clear it was not malignant, although as it protruded from the anus it was a very ugly-looking affair. On examination, its central portion was found to be fibro-nuclear. Outside this were branching papillæ, and the whole was covered by epithelium. The patient, who had been much pulled down, and had a very malignant aspect, rapidly recovered, and lost his unhealthy appearance.

I have met with two instances of remarkably vascular polypoid growths of large size. In the one I operated with the clamp and cautery; in the other, where the pedicle was not distinct, and where the tumour seemed to be more of a villous character, I destroyed it with repeated applications of nitric acid. In both cases the health had been seriously damaged by the long continued and excessive hæmorrhage.

LECTURE III

ON THE TREATMENT OF HÆMORRHOIDS AND PROLAPSUS

I PROPOSE to devote the entire of this third and last Lecture to the consideration of the treatment of hæmorrhoids and prolapsus, two forms of disease of the rectum which are, perhaps, more commonly met with than any other in the same locality, and which produce a vast amount of suffering and injury to health, although there are few affections equally severe which are so readily remedied when appropriate measures are adopted.

The observations which I shall make apply almost entirely to the surgical treatment of these disorders; it is not my purpose to refer at any length to those cases where the affection is but slight, or comparatively so, and where well-known medical means combined with proper diet and exercise soon give the relief which is sought. The instances to which my remarks will be addressed are those where the affection in either form has lasted for a length of time, has resisted the ordinary general and local means of treatment, and where in order to effect a permanent

cure some strictly surgical operation or appliance is imperatively called for.

I must refer in this place to the observations of Mr Gay, who has recently, in his admirable 'Monograph on Hæmorrhoidal Disorder,' broached some views in connection with their pathology which are at variance with the opinions which have generally been entertained. It is for the most part believed that hæmorrhoidal and other disorders of the rectum are caused by morbid conditions of the liver, which interfere with the venous circulation; but Mr Gay, after having carefully examined into this matter, has come to doubt the correctness of these views. He says, at p. 29 of his memoir, "I cannot avoid the question—already *popularly* determined in its favour—how far is the disturbance of the hepatic circulation, or structural change in the hepatic tissues, chargeable with hæmorrhoidal disorder or its aggravation?" And after detailing his experiments, and reasoning upon his observations, he says, at p. 38, "There are, indeed, substantial grounds on which not only hepatic disease but disease of any of the organs of the trunk interposed between the rectum and the heart, cannot be said to be specially conducive to the production of rectal hæmorrhoids. In other words, with all their seeming disadvantages, especially their want of valves, the hæmorrhoidal currents suffer as little, and perhaps less, resistance from objective interference, normal or other to their

course, as the vein currents of almost any other part of the body." The conclusion which Mr Gay has come to is that hæmorrhoidal disease is essentially *local*.

Although these views are opposed to those generally maintained and kept before us in the treatment of hæmorrhoidal disease, I must admit that anything coming from such a careful and indefatigable observer as Mr Gay is known to be, is worthy of more than passing consideration.

I have but little to say about external hæmorrhoids. There is no difference of opinion amongst well-informed surgeons as to the treatment which should be adopted when some strictly surgical measures are called for; as a general rule, it may be stated that in cases of external hæmorrhoids which are causing any annoyance either by their size or other condition, the remedy is excision with the knife or scissors. I refer more particularly to those instances where from repeated attacks of inflammation and irritation to which these hæmorrhoids have become liable they have been converted into more or less solid tumours, which grow about or completely encircle the anal orifice, are liable to inflame, ulcerate, and become fissured; hence any other treatment but excision is merely palliative, and will be of no permanent benefit. The morbid growths should be separately removed by means of a vulsellum and sharped curved scissors. The wounds generally

heal up very rapidly, and enormous relief is very quickly experienced.

But there is one caution which observation has taught me, and which I will venture to suggest to you, and this is that we must take care even in this simple operation that we do not make matters much worse; for if too much of the tissue around be taken away at the same time that the tumours are removed, a firm unyielding cicatrix, in which the anal orifice is involved, takes place in the course of time, and the patient will suffer from stricture of the bowel—a more formidable disease than external piles. I have witnessed this occurrence after a careless operation of this kind; but in no instance was it more striking and sad than in a case which I have related in the third edition of my book on 'Hæmorrhoids,' and which I will briefly refer to here.

A lady in the prime of life and maturity suffered severely from external hæmorrhoidal tumours, and knowing little of the various departments of our profession, unfortunately for herself, placed herself under the care of a well-known "lady's doctor," as our worthy friends the accoucheurs are styled by the public. This gentleman recommended an operation, but instead of getting some surgical colleague to see the case, operated upon the poor woman himself, cutting away right and left and severing everything, tumours, skin and all from around the margin

of the anus. This was in April. In June she was suddenly seized with almost fatal obstruction of the bowels, and on examination it was found that the anus was nearly closed. Treatment was commenced, and in the course of time the patient could pass a bougie for herself, and partly recovered her health. In September she consulted me, and I found her in a miserable plight. The natural folds about the anus were completely destroyed. There was a dense firm cicatrix on the site of the operation; and on introducing my finger, which was a work of extreme difficulty to myself and pain to the patient, I found that the cicatrix had involved nearly one inch of the bowel. She had great difficulty in evacuating her bowels, was compelled to pass a bougie every day, and her health was shattered by the physical and mental suffering to which she was continually subjected. I promised her considerable relief if she would allow me to divide the stricture, but she had such a horror of any more operative interference, that she declined my services and contented herself with the daily use of the bougie, which of course she must not omit during the rest of her life.

The great point in doing this operation is to take away all redundant and hypertrophied tissue, but not to encroach upon the healthy skin, except in those cases where there is a very great relaxation of the sphincter; then, indeed, the excision of some-

thing more than the hæmorrhoidal tumours themselves may not only be not hurtful, but will be productive of much good in causing a contraction and strengthening of the anal orifice.

There is one other point in connection with external hæmorrhoids I will briefly refer to, because I find that both in a pathological and therapeutical view there is much error.

We are called, not unfrequently, to see a patient who is suffering most acutely from an attack of external hæmorrhoids. On examination it is found that there exists at one or at more than one part of the anus a circumscribed bluish swelling, perhaps the size of the top of the thumb, and covered by a tense thick skin. The patient has been confined to his bed for several days, trying all sorts of remedies, local and general, without any relief. Leeches have for the most part been employed, but still the sufferings of the patient have continued. The remedy in such a case is of the simplest kind, and is founded entirely upon a correct appreciation of the pathology of this simple though very painful affection. The fact is that the tumour in question consists essentially of coagulated blood. One, or more veins have become enlarged, and, from some cause or other, irritated; the blood has either become coagulated in the vein itself, or, as sometimes occurs, the coats of the dilated vein have given way and the fluid has escaped into the surrounding

tissue, has set up further irritation, and formed for itself a coagulum; the skin around is irritated, distended, and pressed upon, and the most exquisite pain produced. Neither leeches, lotions, nor opiates will give any relief; the tumour must be cut fairly into, and the result is that a coagulum of blood, varying from the size of a pea to that of a nut, will be turned out, and the relief to the patient's sufferings will be immediate. I have seen most extraordinary errors in practice amongst men who ought to know better in such cases, and producing much prolongation of suffering to the unfortunate patient.

One of the last and most striking cases, however, to which I was called, occurred in the person of a homœopathic practitioner, who had been confined to his bed for several days before he sent for me. When I got to the sick man's bed I found things exactly as I have described. The patient, unlike, I believe, the majority of his colleagues, submitted himself to the treatment of a fellow-believer in the same absurdity which he practises himself, and, as may be well supposed, the knowledge of pathology in this practitioner's possession was very limited; the globules and all other means failed, and my patient was obliged, *nolens volens*, to apply to the resources of legitimate surgery. I made a simple incision into the tumour, let out a coagulum of blood, and in a very brief period the patient was up and about.

There is really nothing else worth calling your attention to in connection with the subject of external hæmorrhoids even had I the time; therefore I will at once proceed to bring under your notice the treatment of internal hæmorrhoids. In the majority of cases it is seldom that the operating surgeon is consulted until the disorder has lasted for years, and been productive of much suffering and depression of health, and therefore there is little call for any other treatment but that which radically and permanently cures the affection. I have, in a work which is well known to the profession, very strongly insisted upon the excellent results which are produced by the use of the strong nitric acid in certain instances of very vascular and bleeding hæmorrhoidal tumours. At one time, indeed, I treated a large proportion of cases of the kind by the application of the nitric acid, and got most favorable results from this plan; and I agree with my friend, the author of 'The Surgeon's Vade Mecum,' that it is difficult to exaggerate the benefits of this plan of treatment; but a very large and careful observation has taught me that for this treatment the cases must be well selected, and that it is mainly in that class of the disorder in which the tumours are small, granular, very vascular, and easily bleeding, where the remedy acts with anything like efficiency and permanency as regards cure. In such cases, as Dr Druitt says, and as has

been abundantly recorded in my little work, the effect of this agent is perfectly remarkable. By two or three careful applications of the acid, hæmorrhage which has been going on for months or years becomes completely arrested, and the size of the tumours materially reduced, if not altogether destroyed. And even if after a time any fresh symptoms of hæmorrhage or protrusion appear, one or two applications of the remedy will produce the same beneficial effects.

In by far the majority of cases of internal hæmorrhoids, however, this disease is not of that character which can be effectually remedied by the application of nitric acid alone. There are very frequently distinct tumours, of more or less magnitude, instead of the bright red, vascular, sessile tufts which cause so much annoyance, and yet are so amenable to nitric-acid treatment. I have, in the work already alluded to, and in my article on "Diseases of the Rectum," in Holmes' 'Surgical Dictionary,' drawn the distinction between the different kinds of hæmorrhoidal tumours. And I need only state here that in those of a bright red vascular character the arterial structure chiefly predominates, whereas in those in which the tumours are of a darker colour, and not unlike a mulberry in appearance, they are composed of veins to a large extent, although, doubtless, the arteries enter as well into their formation. It is very important, in a practical point of

view, to bear in mind this distinction, especially with reference to the employment of nitric acid, for in the last-mentioned cases this agent will generally be of no use whatever, whereas in the former it is all-powerful in remedying the malady.

Although since the use of an operation to which I shall refer very specially by-and-by, I have not employed nitric acid so much as I did in former years, still I have had a very large experience of it under circumstances which would thoroughly test the value of the agent. And I have never witnessed any serious results from it, such as have been alluded to by some writers; and as regards the so-called torture which is produced by it, all I can say is that, if the acid be applied, as I recommend, to the diseased part through a speculum previously introduced into the bowel, the patient cannot tell whether the surgeon be applying the acid or merely touching the diseased part with a piece of lint. I have over and over again verified this in my own practice. Of course, if the acid be allowed to come into contact with the sensitive skin of the anus, the pain is really very severe for some time; but then this mistake should not and will not occur in the hands of a careful surgeon; and it may be stated, as a rule, that nitric acid should never be applied to burn off external piles, nor should patients ever be allowed to apply it themselves.

Until within a few years almost the sole means of

destroying those hæmorrhoidal tumours which could not be remedied by nitric acid was the use of the ligature, and even now some of our hospital surgeons, at least, will use no other remedy, so wedded do people become to old-established methods of treatment; and in the various works on diseases of the rectum very little is said of any other mode of treatment than this. The reasons for this predominance of the ligature over other methods are to be found in the fact that, as a rule, it is a successful means of curing internal hæmorrhoids, and, moreover, it took the place of a treatment which was in fashion at the beginning of the present century, and which consisted in cutting away the tumours with the knife, without, at the same time, resorting to any means to prevent hæmorrhage. The result of this was that some very valuable lives were lost from bleeding; but, thanks, chiefly, to the candour of the late Sir Astley Cooper, this dangerous mode of treatment was done away with, and the ligature was made to supersede it, and until within a few years this has been the only operation which the majority of surgeons have thought of adopting for the cure either of hæmorrhoids or of prolapsus of the rectum.

Admirable and permanent in its result though the application of the ligature proved to be, it was found that there were many disadvantages connected with it, and that it would be desirable if some other means of treatment, equally efficacious, could be put

in force. Every now and then a fatal case occurred quite suddenly and unexpectedly after the operation. In some instances a prolonged convalescence followed, the patient being confined to bed for many weeks, whilst in others it happened that the wounds resulting from the separation of the ligatures would not heal up for a long period, and the patient would be subjected to much painful suffering, necessitating, perhaps, some other operation. About thirty years ago the late Mr Cusack suggested the employment of the clamp and cautery as a means of destroying hæmorrhoidal tumours, and his practice was followed by other surgeons in Dublin. In this country Mr Henry Lee adopted the method of using the clamp, cutting off the tumours, and then stopping the hæmorrhage with the actual cautery. The results of this gentleman's experience induced me to put the plan in force, and in the first cases which occurred in my practice I was so satisfied with the treatment, and so convinced of its superiority over the ligature, as regards the important elements of safety to life, freedom from suffering, and saving of time, that I determined to treat in this method those cases, both of hæmorrhoids and prolapsus, where I thought the ligature was inadmissible, or where the patient objected to it, as well as those wherein the application of nitric acid alone would not suffice to bring about a cure.

I was not long, however, in finding out that the

clamps hitherto used were capable of being greatly improved, for these were either of an awkward shape, were so constructed as regards the apposition of their edges, and so totally unfurnished with regulating power, that the efficiency of the instrument and value of the treatment were much impaired; so I suggested to Mr Matthews to make me an instrument shaped somewhat like the ordinary clamp Mr Curling uses for applying nitric acid; but the edges, instead of being serrated, or not meeting in their entire length, as in an instrument used by Mr Henry Lee, were to be so constructed that they accurately fitted their whole extent by means of a groove on one blade and a raised surface on the other. I soon found the value of this, for the mucous membrane or tumour to be removed could be thoroughly compressed, and there was no fear of the bleeding which would take place when the clamps with serrated edges were used and the tumour excised. I next improved the instrument by furnishing it with a catch, and by this I was greatly assisted; but when the pressure was taken off the divided base of the tumour the cut surface would suddenly recede from the grasp of the blades, and if some vessel not thoroughly cauterised should bleed, it was difficult to get hold of the part again; so, to meet this emergency, I had a light but powerful screw added to the handles of the instrument, by means of which I could so regulate the power of the

blades as to take the pressure off the cut surface of the rectum gradually, instead of suddenly, so that if any portion of the divided surface was not thoroughly cauterised the bleeding point would show itself, although still retained within the grasp of the blades, and by the slightest turn of the screw it could be secured and the bleeding vessel be entirely sealed up. This addition to the instrument I consider to be of the utmost importance, and, indeed, I never think of performing an operation without employing the instrument furnished with the screw. There are one or two other improvements which have suggested themselves to me in the course of my practice, and one of these consists in the addition of a spring at the junction of the blades and handles, so that the former may more readily open when the screw is turned. Mr Matthews has also made the instrument latterly with the raised edge of the blades marked or roughed with numerous small grooves, so as to retain the tissues more readily. I cannot see that there is room for any further improvement, the instrument, in my opinion, being now as well adapted for its purpose as it possibly can be. It is very essential for the right action of the clamp that the blades should be so constructed as to have their parallelism complete when they meet, otherwise some portion of the enclosed membrane may slip after the tumour or prolapsus has been cut away.

The operation, whether for hæmorrhoids or prolapsus, is very simple, and consists of the following manœuvre:—The diseased portions, being well brought down previously by an injection, are separately seized with a vulsellum and handed to an assistant. The part is then enclosed within the blades of the clamp, which are screwed home quickly and thoroughly; the prominent portion of the pile or prolapsus is then cut away by a sharp pair of scissors, the cut surface is next dried by a piece of lint or sponge, and either the strong nitric acid or the actual cautery, so shaped as to come into contact with the whole of the raw tissue, is applied; when this is effected the blades are gently and slowly unscrewed, and if there is no bleeding the part is well oiled and allowed to return within the cavity of the gut; if, however, any bleeding point is seen, the blades are quickly screwed together, and the cautery is applied until the vessel be thoroughly sealed up. The finger is then introduced well up into the rectum. This step serves the triple purpose of returning all the parts well, of compressing any point which might possibly bleed, and of exciting the sphincter to healthy action. I generally introduce at the same time a suppository of opium.

Now, it might appear to some that this operation would be very painful, but, singular to relate, if great care be taken not to include any of the integument within the blades, and not to allow the nitric

acid or cautery to come into contact with it, the patient does not feel much pain, and really does not know when the heated iron is being applied. If, however, the cautery be kept in contact with the blades of the clamp for more than a few moments, the patient will suffer pain by the transmission of heat through the contact of the metallic surfaces, and therefore it has been suggested to me to have some non-conducting medium applied to the under part of the blades.

Since the above was written I have made this addition to the clamp and have found it answer the purpose required most admirably. Mr Matthews has so managed as to cover the blades, both posteriorly and laterally, with a thin layer of ivory. The thickness of the instrument is not so much increased by this addition, and the heat from the cautery is prevented being conducted to the neighbouring parts. I am not now in the habit of applying the cautery at a red heat, finding that when the iron is heated just below this every purpose is answered. By these two modifications it will be found that the operation is nearly painless, if no external tissue requires interference.

Since the last edition of these lectures was published I have made what I consider to be a valuable addition to the clamp. I requested Mr Matthews not only to cover the blades posteriorly and laterally with ivory, but to extend the ivory for at least half

an inch from the metal of the blades, so that in a prolonged operation, or where the cautery requires to be applied very freely, the heat cannot be conducted to the surrounding tissues, which would be the case if only the blades themselves were protected. I have found these wings to be of immense service in some severe cases, and if the patient does not take chloroform I always use an instrument so constructed.

Since the issue of the last edition of these lectures, I have made an important modification in the operation, which I have already made public in the pages of the 'Lancet,' and which I will now describe.

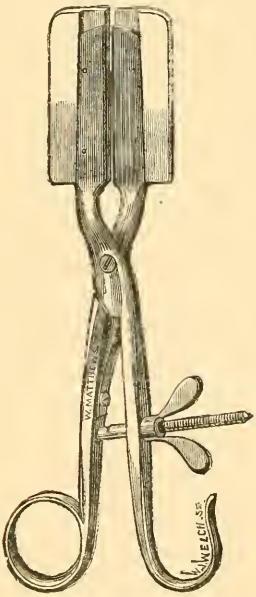
It will be seen, according to the details given of the operation, that after having clamped the tumours I employed a sharp pair of scissors for the purpose of removing them, and subsequently applied the cautery at a dull heat in order to arrest bleeding. Every now and then it happened that a vessel would escape the action of the cautery, and it would be necessary to tighten the blades of the clamp after having relaxed them, and reapply the hot iron to the vessel which had not been efficiently closed. With a view to obviate this, I requested Mr Matthews to construct for me some cauterising irons which would serve the double purpose of removing the tumours and arresting hæmorrhage by a simultaneous action. The cauterising irons can

be shaped according to the fancy of the operator. I generally employ such as are shown in the engraving. The essential feature connected with them consists in the structure of the edge, which is either serrated or sharp, according to circumstances. It will be seen that when the hæmorrhoidal tumour or prolapsus is removed by this instrument, every vessel must of necessity be cauterised; no tissue can escape the action of the iron as the part is removed. For the most part I am in the habit of employing the serrated cautery, using it when at a dull red heat. It works its way through the tissues more slowly than the cutting cautery, and in this respect effects a more thorough cauterisation. Still the sharp-edged iron is a very efficient instrument, and if used slowly and not too much heated will answer every purpose. The best plan for the surgeon to adopt is to be furnished with instruments of either construction; the same precaution as laid down by me when using the scissors should be observed. The surgeon must not remove the growth too close to the clamp, but he should leave a surface about the eighth or sixth of an inch deep. In this way there is no fear of any tissue escaping from the clamp, and the possibility of too great contraction after the healing of the wounds is obviated.

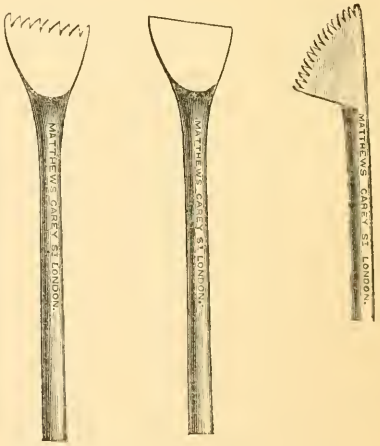
I have now employed this method of operating for upwards of two years, and am very much pleased with it, and the occurrence of any hæmorrhage has

been materially lessened, although with very careful attention to details there was but little fear of it when the scissors were used before the cautery was applied.

It is only right that I should mention here the methods of operating for hæmorrhoids which have



Clamp.

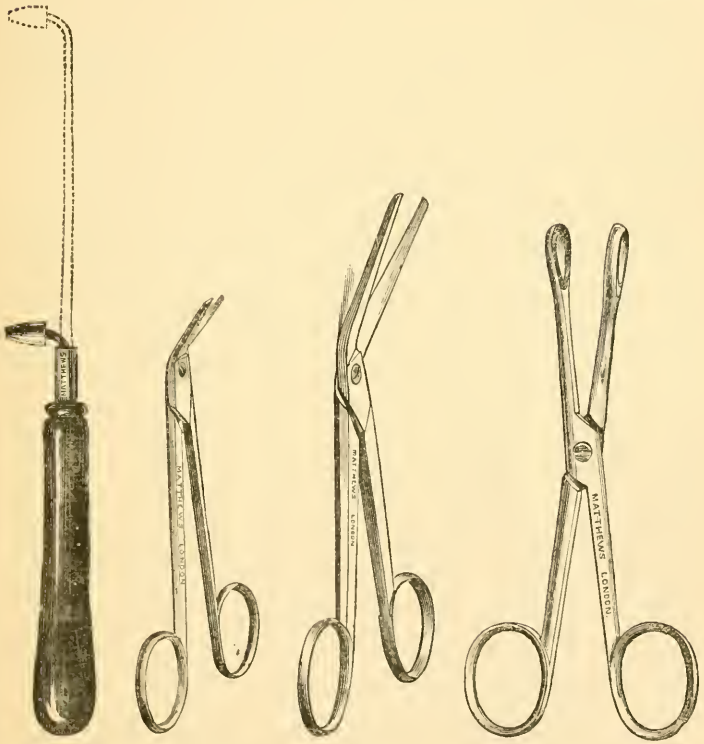


Serrated and cutting cauteries.

been separately brought before the profession recently by Mr Pollock and Mr Benham, by Mr Coates, of Salisbury, and by Mr Whitehead, of Manchester. In the first of these methods the operation is effected by using a clamp which crushes the pile, the prominent portion of which is cut

away, the clamp being allowed to remain for a brief period; if any bleeding remains a ligature is to be applied.

In Mr Coates' method a clamp also is used, but



1 2 3 4

1. Cautery, so constructed as to close in telescope fashion.
2. Scissors, with small blades, so constructed as to fit the upper surface of clamp.
3. Larger scissors.
4. Blunt forceps, for holding or withdrawing hæmorrhoidal tumours before clamping.

not for the purpose of crushing. Catgut threads are passed through the base of the pile underneath the clamp, the prominent portion of the tumours is then removed, and the cleanly cut wound thus made is brought together by the sutures after the clamp is taken off.

In Mr Whitehead's operation, after the sphincter ani has been paralysed by stretching with the thumbs, the piles are separated into segments by a longitudinal incision through the mucous membrane; the tumours are then dissected from below upwards, and a transverse cut through the mucous membrane is made at the apex of each tumour which is retained merely by the vessels and cellular tissue. The tumours are then removed by twisting with a pair of forceps. The cut edge of the mucous membrane above and of the integument at the orifice of the anus are then stretched together.

Each of these surgeons speak in high terms of the good results of these individual operations, but as I have not had any personal experience of either methods, I must content myself with this reference to these additions to the surgery of hæmorrhoids.

Now that I have described so fully the mechanism of this operation and of the instrument which goes under my name, I shall explain the reasons why, in my humble opinion, and, indeed, in the opinion of most who have seen me use it, the operation of removing hæmorrhoidal tumours and prolapsus of

the rectum by this improved clamp possesses such superior advantages over the operation by the ligature, and in order to do so effectually I shall have to contrast the two kinds of operation, by bringing forward cases of each.

In one case where I applied the ligature, a patient of the late Dr Wildbore, an old lady, very nearly lost her life from secondary hæmorrhage and sloughing about the time the ligature was separating. By very great care, however, she rallied, and ultimately, after a protracted convalescence, recovered.

In another case, which occurred in the person of a middle-aged lady, a patient of Drs Beaman and Vine, the ligature was applied most carefully by myself, for a mass of internal hæmorrhoids which had bled profusely for years, and had reduced the patient to such a state as to produce œdema of the legs. Everything went on well until the separation of the ligatures, and, indeed, until nearly three weeks had elapsed from the operation, when I was requested by Dr Vine to see the lady again, and, to our great disappointment, the hæmorrhage had returned as profusely as ever. We were certain that every portion of the disease had been removed.

This patient was kept very quiet in bed, and the most powerful astringent injections were used, but in vain. The bleeding went on as badly as ever, and reduced her so that Dr Beaman thought she would die. At the end of a week I carefully

examined her with the speculum, and, finding a spot of ulceration whence one of the ligatures had separated, applied the strong nitric acid. This had no effect, for at the end of a week the hæmorrhage was as profuse as before, and a second careful application of nitric acid was made, although there was no hæmorrhoidal tumour to be seen. This second application seemed to lessen the bleeding somewhat, but at the end of another week the bleeding came on again very badly, when I made a third very careful and free application of the acid to the entire of the lower portion of the bowel through the speculum. Fortunately this succeeded in arresting the bleeding, but this lady had gone through great danger and her convalescence was sadly protracted, and it is impossible to estimate the anxiety and annoyance to which Dr Vine and myself were subjected, because the especial feature which drove this lady to submit to the operation was the excessive and debilitating hæmorrhage, which I confidently promised would be thoroughly put an end to by the operation in question.

There is another condition which, every now and then, obtains after the use of the ligature, causing great suffering and protracting for a long time the convalescence. I refer to the ulceration which sometimes remains unhealed for a long period after the separation of the ligature. I have met with two or three such cases. Not long since I was requested

to see a gentleman who had six weeks previously undergone the operation of ligature for internal hæmorrhoids by a first-class surgeon; everything had gone on well, and the patient returned home, but he began to suffer excruciating pain each time the bowels were evacuated, and his surgeon failed to give him any relief. When I saw him I found him in bed, his countenance wearing the expression of much pain; and on examination I found a small unhealed ulcer, just at the upper edge of the sphincter. His medical attendant, whom I met in consultation, suggested that the muscle should be divided, but, as the patient did not relish the idea of another operation, I recommended delay, and amongst other things ordered the use of some chloroform ointment. This, especially, gave great relief; and in a short time the patient got quite well, but his convalescence was very protracted.

In another case the use of the ligature was followed by a great deal of suffering and the formation of an ulcer at the site of ligature, which remained unhealed and caused severe pain for many weeks after the operation. The patient was a lady sent to me by Dr Hensley, and I applied a ligature to one internal pile on May 11th. Complete retention of urine followed for a week; subsequently there was great pain at the seat of operation. An abscess formed between the mucous and muscular coats of the gut, and after this had discharged, a large painful ulcer remained. It

was very slow in healing; the lady could not leave her bed for six weeks, and was not able to be moved to the seaside until the end of June. In August I examined the part carefully, and then found that, although she was in good health and did not suffer any pain, still the ulcer had not healed, being then as large as a sixpence.

I may mention another case to illustrate the tedious recovery which sometimes occurs after the use of the ligature. It was also in the person of a lady, a patient of Dr Brodie Sewell, on whom I operated for prolapsus of the rectum by the ligature. Nothing particular occurred immediately, and the ligatures separated in a few days, but there was extreme suffering in the part operated upon, defying most of our remedies, and it was quite six weeks before this lady was able to be moved away, and at that time she was in an extremely feeble and irritable condition.

As an illustration of the severe effects which may follow on the use of ligatures, I mention also the following case:

A widow lady, æt. 46, consulted me in September, 1865. She was dreadfully blanched by long-continued bleeding from the rectum, which had been going on severely for upwards of a year. A few years previously, she was operated on in the country

by the ligature, but only got partial relief. On examination I found a large tumour composed of several internal piles, and so vascular were they that a considerable impulse similar to that of an ordinary aneurism was transmitted to the mass, and on straining large jets of arterial blood were emitted. Under these circumstances, and with my, at that time, comparatively limited experience with the clamp, I thought it safest to apply the ligature. I performed this operation on Saturday, October 6th, under chloroform, tying four large piles and cutting off the thickened skin around. This operation was long and tedious, and the patient lost much blood.

This operation was followed by the most severe symptoms, notwithstanding the employment of large and continued doses of opium and the local application of ice. The pain was most intense, and the constitutional disturbance in a corresponding degree severe. The pulse became rapid and wiry, and the countenance anxious. This state of things continued for nearly a week after the operation, when the ligatures began to separate, and by the tenth day they had all come away, and the pain subsided, but she continued very feeble and required large doses of brandy and opium. Between the third and fourth week she was attacked with obstruction of the left femoral vein and swelled leg, and it was not until six weeks had elapsed that she was able to go out for a drive.

At one time I was afraid this patient would have died, and I have no doubt that her life was placed in great peril. It is true she was in a most unfavorable state to bear any severe operation. I was afraid at that time to operate with the clamp, not having sufficient confidence in the power of the cautery to arrest the bleeding from such large vessels as entered into the formation of the tumours.

Another case, also, in which I operated with the ligature shows the severe results occasionally attending this proceeding.

I was called down into Northamptonshire to see a middle-aged gentleman who had been suffering severely from hæmorrhoids for twenty years. I saw him with Mr More, of Rothwell, on July 25th, and found that there was a large tumour consisting of external and internal piles; there was, moreover, a large polypoid growth not unlike a bunch of warts growing from the rectum. I thought it at that time too severe a case for the clamp, and accordingly operated with the ligature; it was needful to apply several as the mass was so large.

This gentleman suffered a great deal of pain after the operation, and his pulse became and continued very rapid. On the 29th he was very restless, perspired profusely, and became delirious. This

condition caused much anxiety; there was picking at the bed-clothes and profuse perspiration. Large quantities of stimuli were given and were well borne. Nevertheless, on August 5th, traumatic delirium fully developed itself; he tossed about at night in a restless manner, and picked at the bed-clothes. This delirium continued more boisterous, and the patient got much weaker and remained in the same state until August 17th, when Dr More wrote that "a slight improvement had taken place," and from this date, although he continued very feeble and suffering from want of sleep, he slowly recovered, but was not able to go out in his carriage until September 27th, two months after the operation.

This gentleman evidently had a very narrow escape of his life, and, of course, we cannot attribute his dangerous symptoms to anything else than the particular kind of operation he underwent. It is true, like the last case, it was one of exceptional severity, but the patient was in fair health and had not been much reduced by bleeding.

I am sorry to say that, in addition to these two cases which caused myself and Dr More so much anxiety, I have to relate two cases where death followed the use of the ligature. To the first of the two cases I wish to direct particular attention, as at the time it caused considerable sensation, the patient being a member of our profession, and as I had used

the clamp on one side, it was stated that death had been produced by the use of this instrument. I therefore related the case at a meeting of the Fellows of the Medical Society of London, when it was fully admitted that the fatal event was due not to the use of the clamp but to the ligature, which unfortunately, in a moment of indecision and want of confidence in the power of the clamp and cautery, I had employed for the removal of the greater portion of the tumour.

Mr F—, æt. 30, had suffered terribly from bleeding piles for many years, and had undergone one or two operations with partial relief. He applied to me in September, 1865, and requested me to use the clamp and cautery as he had suffered so much pain when the ligature was applied. He wished me to defer any examination until I was prepared to operate. I went prepared to do so on September 19th, and on making a thorough examination whilst the patient was under the influence of chloroform, I found, to my astonishment two very large excrescences protruding on each side and attached to the rectum by a broad and thick base. I enclosed the smaller of the two in the largest clamp I had and removed it, but the other one was so large and had such an extensive base that I dared not trust to the clamp, and accordingly ligatured the mass in the ordinary way and cut it off close.

He did not suffer much after the operation, but in

a few days a good deal of swelling took place, and on the 29th there was an extensive phlegmonous inflammatory swelling of the buttock *on that side where the ligature had been applied.* On the 31st this had increased to such a degree that I made a deep incision into it, but did not evacuate any pus. I also removed with the scissors some of the thickened integument from around the anus.

The patient remained in a weak unsatisfactory state until October 13th, when I again saw him and found him very low; he had had a rigor the day previously, and on examination of the anus there was a large unhealthy ulcerated surface in the situation of the ligature, and a profuse discharge issued from it. He got worse and died on the 18th.

This was clearly a death from pyæmia, and there can be no doubt from the circumstances noted that the cause of mischief was the presence of the ligature; for even assuming that the pyæmic mischief resulted from the second operation of making the incision, that step was undertaken for the relief of the inflammatory action which had set up on the side of the buttock where the ligature had been used; whereas, on the other side where the clamp and cautery had been employed, no such action had occurred. I deeply regretted I had not used the clamp for the larger tumour, but at that time I had not sufficient confidence in it.

The second fatal case occurred in July, 1866, and was a very sad case. The patient was a gentleman, aged 35, who was seen by me in consultation with Dr Budd and his two medical attendants. He had suffered a long time from most exhausting hæmorrhage, and when I saw him he was in such a feeble condition that he looked like a person about to sink from some malignant disease. He had had a tremendous attack of hæmorrhage only two days before we saw him, and he was in such a state that it appeared as though another such attack would destroy him. It was Dr Budd's opinion that an operation should be undertaken as soon as possible, in order to prevent such another occurrence; but on all of us consulting, it was thought better to keep the patient at perfect rest, nourish him well, and delay a few days. There was a large mass of mucous membrane protruded at each action of the bowels, and the act itself was very painful and exhausting.

On the 25th I operated with the ligature. I found the parts in such a vascular condition that large quantities of blood escaped through the punctures made by the needle. The operation itself was a prolonged one, in consequence of the size and number of the tumours necessary to be ligatured, and the loss of fluid—for it could hardly be called blood—from the vessels was large. I took the precaution of tying the ligatures very tightly, but an

oozing went on after the operation, and it was necessary to plug the rectum in about four hours; there was no rallying at all, and the patient died next day.

It might appear to some that this patient was not in a condition to bear any surgical operation, but it was a question whether he should stand the chance of one or die from another attack of hæmorrhage; the former alternative was, without hesitation, agreed upon.

I did not use the clamp and cautery, because I was not even at that time sufficiently acquainted with its power, and of necessity the operation would be a very prolonged one; but I question very much now whether the styptic power of the actual cautery would not have completely commanded the bleeding, and I am perfectly certain that by this latter operation the bleeding during the proceeding would not have been anything like so great; in fact, with a well-made clamp and very careful execution, no blood at all should be lost during the process.

I dare say that my experience with the ligature has been unfortunate in an especial manner; for, doubtless, there are surgeons who have operated in many cases and have not met with any fatal result. Still this occurs every now and then, and if it does take place in private practice, it is not known except to those immediately concerned; thus, for instance,

I may mention that one of my own patients, whom I was treating with nitric acid, suddenly got tired of me and my plan of treatment, and in a few days I heard of his death, which had followed the operation of the ligature in three days.

The operation of the clamp and cautery, as above described by me, offers, then, the great advantage of safety over the ligature, for there has not been any death from the operation in my hands, nor have I heard of one occurring in the practice of those other surgeons who have employed it, and it seems hardly possible that any danger can be connected with the proceeding beyond that of hæmorrhage; and to prevent that has been the especial object of the alteration in the mechanism of the instrument; and all those who have seen me perform this operation are well aware that this object has been fully attained. Hæmorrhage, as a result of the proceeding, can only be due to a want of care on the part of the surgeon—that is, if he employs the clamp I describe—for he has no business to finish the operation until every bleeding point be cauterised. It will be seen that in one of my earlier cases considerable amount of blood was lost, but this was the result partly of haste and carelessness, and of the use simply of nitric acid as a cauterising agent. I am more particular in insisting upon the freedom from hæmorrhage, during and after this operation, as I am aware it has been assumed that such may

occur. Even so excellent a surgeon as the late Mr De Morgan, in some clinical remarks published lately, held this out as the great objection to the use of the clamp and cautery; but I maintain that if the surgeon uses such ordinary care as he adopts in other cases, and employs well-constructed instruments, any great or even moderate loss of blood is impossible at the time of the operation, and as to its occurrence as a secondary phenomenon it has not been my lot to meet with a single instance out of all the cases of hæmorrhoids and prolapsus where severe secondary bleeding has taken place. Of course if a surgeon is careless and does not adopt the proper means, hæmorrhage will ensue here as at any other operation where important vessels are interfered with; but then he must be careful not to omit any of those precautions which are found necessary. It is necessary to see that the clamp be well screwed up before the tumour be cut away, and above all the cautery must be liberally applied, in severe cases especially, and the blades of the clamp must be gently and gradually released by means of the screw in the handles, so that if any vessel be unsealed it can be at once recognised and closed by the hot iron. I know there has been severe bleeding in some cases, but I am sure the precautions I have been sketching have not been followed out. It is not probable that either tetanus or pyæmia, the two most formidable results of the ligature, can occur

after this operation, because the condition which produces the former affection does not obtain, viz. the presence of an irritating substance around the nerves for several days; and pyæmia, or other inflammatory affections, will be effectually prevented as the exposed surface is deprived of its vitality and the veins are blocked up by the cauterisation. Another and great advantage is, as I shall be able to show you, that patients are not detained above half the time in bed as is consumed when the ligature is applied, and the convalescence altogether is much more rapid; and in this hard-working age the saving of time is of the utmost importance to a patient who is compelled to give up his business or other occupations for the purpose of undergoing an operation; indeed, in many instances patients are debarred from submitting to the operation of the ligature in consequence of the necessary time consumed in the convalescence.

In a paper which I read before the Medical Society of London, in April, 1875, I narrated my experience of 400 cases where I had operated, and amongst these cases I mentioned six or seven where some hæmorrhage more or less severe had taken place, but it was not necessary to adopt measures more decided than those of injecting iced water or introducing a speculum for a few minutes. I mentioned also that in at least three of these cases I had been careless and had allowed a large vessel, which had

slipped away from the clamp, to remain uncauterised, in the hopes that the vessel would contract, and, consequently, there was smartish bleeding. In one of them especially there was a very large mass growing from the muco-cutaneous edge of the sphincter; in order to get the clamp well around this I made a freer cut with the scissors, immediately a large vessel spurted, and I was foolish enough to complete this operation without cauterising this. This was a very bad error. I cannot too strongly insist upon the necessity of not allowing a single vessel to remain uncauterised if a portion of the cut base of the hæmorrhoid or prolapse slip away from the clamp, which may occur if the clamp be not very well constructed, or if too much texture be embraced at once. The retracted part must be seized with the forceps and brought within the grasp of the clamp, and then the exposed surface should be freely cauterised and the bleeding will be soon arrested, and if once arrested it will not recur.

I have met with a few cases where on the first action of the bowels a considerable amount of blood has been passed, and the patients have become alarmed and hurriedly sent for me, but on examination it was discovered that the blood was evidently that which had oozed into the rectum soon after the operation, and had remained there; and when this occurrence has taken place, I have noticed that, after having removed the internal growths, I have

removed some external tissue as well, and have divided vessels which bled more or less freely, but which I did not think required the cautery. In all these instances alluded to, where there has been smartish bleeding, the occurrence has been on the first action of the bowels except in one case, which has been recently under my care. It was a very severe case, requiring very free applications of the cautery. The bowels were acted upon on the fifth day with medicine, and there was not any bleeding. On the day week of the operation the patient got up, walked about a good deal, and on the following morning a solid motion occurred, and in about half an hour a considerable quantity of coagulated blood mixed with some arterial blood was expelled, causing the patient to faint. Considering the very severe nature of this case, the patient had exerted himself too much. Moreover, it is very undesirable in such aggravated cases that the second, or even third action, should take place without aperient medicine.

I have detailed some cases where the ligature was used, and where the patients were confined to bed or to their house for a period of many weeks, and in numerous instances where the hæmorrhoidal tumours, or the prolapsus, is large, a week or ten days elapse before the ligatures entirely separate, and as much more time goes away before the patient is able to leave his bed; whereas in by far the majority of cases where the same disorders have

been treated by the clamp the patients have been able to get out and about in from four to seven days. In some cases, even after the first evacuation of the bowels, which is generally obtained by the action of medicine on the fourth day, the patient feels able to get out of his bed and to walk about; and I have more than once known patients insist upon travelling home long distances on this occurring, because they feel so well. It is quite evident to all who have watched the course of cases equally severe, treated by the ligature and the clamp, that there is not anything like that impression upon the nervous system after the latter proceeding which is produced as a result of the former, and which occasionally causes death.

When I first began to remove hæmorrhoidal tumours with the clamp I used as the styptic agent the strong nitric acid, and in certain cases I found that if the raw cut surface was fairly and thoroughly impregnated with it the hæmorrhage would be effectually arrested. I continued using it in several instances until an occurrence, which I will mention by-and-by, took place, which determined me to employ the actual cautery in all the more severe cases; and although the nitric acid serves the purpose of stopping the bleeding in instances where the part to be removed is not large and not very vascular, as a general rule I would recommend the employment of the actual cautery, not heated to

quite a red heat, as then the tissues are not too extensively burned.

This treatment is equally applicable for the removal of internal hæmorrhoids or prolapse of the rectum; in the one instance the entire of the tumours are taken away, and in the other the redundant tissue, which forms the disorder, may be also thoroughly removed. In those cases, however, of prolapsus where the affection is associated with or has been produced mainly by a dilated and weakened state of the external sphincter, the surgeon must not be content with alone removing the mucous membrane, he must at the same time take away with a curved pair of scissors three or four folds of the loose skin over the sphincter, otherwise the prolapsus will return in course of time, and discredit will be thrown upon the treatment. Should there also be any redundant tissue in the form of tumours or condylomatous growths, it should be also taken away. In those cases where the prolapsus is associated with distinct hæmorrhoidal growths it will be sufficient to remove these, and then the prolapse will be cured without any other treatment, unless there be at the same time a great relaxation of the sphincter, when, of course, some of the integument must be taken away, the incisions being made at right angles to the anal orifice.

In order to prevent the possibility of any contraction of the rectum from a too free ablation of the

mucous membrane, I almost invariably make my patients pass for themselves a full-sized, black-wax rectum bougie two or three times a week. This treatment is serviceable, both in healing any ulceration which may have remained as the result of the operation as well as in preventing the occurrence of any contraction, should extensive removal of tissue have been needful; and with reference to any ulceration remaining after this operation, I may with truth say I have never met with anything of the kind after my own operations. Sometimes, when the disease has been extensive, the ulceration necessary on the employment of the clamp and cautery may not have entirely healed up for three or four weeks, but I have not seen any of my own cases where an ulcer has remained unhealed, as occurs after the separation of the ligature. I saw one case where a medical practitioner, in the country, had operated for hæmorrhoids two months previously with the clamp and cautery, and when the patient consulted me he was complaining of a good deal of pain on evacuating the bowels, and on examination I found an ulcerated surface on the anterior part of the rectum, probably an unhealed portion of the sore left by the operation, but of this, even, I could not be sure, as I did not see the patient before.

I shall now give, briefly, the details of my experience on the use of the clamp in hæmorrhoids and prolapsus, and you will have an opportunity of

judging how far correct are the anticipations of those surgeons who, like myself, consider that this treatment is, as regards safety to life, freedom from unpleasant and annoying consequences, and rapidity of cure, far superior in a large proportion of cases to the employment of the ligature.

Since the period at which I commenced the use of the clamp, which was in July, 1861, I find that I have treated thirty-five cases either of internal hæmorrhoids or prolapsus of the rectum in this way. All of these cases required some surgical operation; some of them were very severe instances of the disorders, and I doubt not that in every instance most surgeons would have employed the ligature. I shall now give, briefly, the details of each, reserving any comments for those cases which are more particularly worthy of attention.

Case I.—An old Indian officer, aged seventy, had suffered for many years from hæmorrhoids and prolapsus. Latterly they had troubled him to a great extent, protruding whenever he took exercise. On examination I found a prolapse of the mucous membrane on the right side, and on the left was a hæmorrhoidal tumour of a dark-blue colour, nearly as large as a walnut. I operated upon him July 31st, 1861, compressing the tumour within the clamp, and after removing it applied nitric acid, which arrested the bleeding. No bad symptoms

followed; the bowels were acted upon by castor oil on the fourth day, with scarcely any pain, and the patient was up on the fifth day. He called on me in two weeks, and said he was quite cured. I saw this gentleman in May, 1864; he remained quite well.

Case II.—A gentleman, aged fifty, long resident in India, consulted me for prolapsus of the rectum, which had annoyed him very much of late. On examination there was a large protrusion of the mucous membrane, and very vascular. I operated on March 7th, 1862, with the clamp, applying the strong nitric acid to the cut surface. There was some smart bleeding at the time of the operation, but it was effectually arrested. This patient rapidly recovered, and was out on the sixth day.

Case III.—A gentleman, aged forty-seven, long resident in the East, suffered from bleeding piles for fifteen years, but for the last three years the hæmorrhage has been constant and accompanied with painful protrusion; the health was much deteriorated; he was pale and bloodless. On March 9th, 1862, I operated upon him with the clamp, removing four very vascular internal hæmorrhoids and applying nitric acid. No bad symptoms resulted, and he came up from the country to see me on the 20th, the bowels acting naturally, without pain, protrusion, or bleeding.

Case IV.—A lady, aged fifty, consulted me for the relief of a hæmorrhoidal tumour of the size of a cherry, which bled and had annoyed her for several years. I operated on her March 20th, 1862, with the clamp, using nitric acid to the bleeding surface. The hæmorrhage was effectually arrested, and she suffered scarcely any pain. This lady called on me in ten days, quite well.

Case V.—M. D—, aged forty-five, consulted me for two internal vascular piles, for which he had been treated by nitric acid without benefit; he had been annoyed for a long time with them. I operated on him April 7th, 1862, with the clamp, using nitric acid as the styptic. Although the tumours were very vascular, the bleeding was effectually arrested. This patient was up in five days, and left London for Scotland in ten days. I heard from him a few weeks ago; he tells me he has remained quite well ever since.

Case VI.—Mr P—, aged fifty, was operated upon for a very vascular hæmorrhoid and prolapsus, May 18th, 1862, by the clamp and nitric acid. This patient was out of my hands by the 26th. Two tumours were removed. I saw the patient in November; he remained quite well.

Case VII.—A middle-aged lady, long resident in

India, had complained of hæmorrhoids for many years; during the last two years they protruded so much, even when she began to walk, that she was compelled to wear a rectum truss, which probably only increased the mischief. She was in a very feeble, miserable state, and on examination I found three large internal hæmorrhoidal tumours. It was a very severe case, and I was anxious that she should have the ligature applied, but she could not overcome her dread of it, and I therefore operated on her by the clamp, removing the three tumours, and applying nitric acid, on the 25th of June, 1862. The hæmorrhage was exceedingly smart, and, as the patient was so weak, and the nitric acid did not appear thoroughly to control it, I, for safety sake, included two or three bleeding vessels in a thin ligature. The operation was of necessity a very severe one, but no bad symptoms came on, and, although her convalescence was protracted over three weeks, she made an excellent recovery, being completely cured of her hæmorrhoids.

Case VIII.—M. S—, aged forty, had three internal hæmorrhoidal tumours of long standing. I operated on them July 29th, 1862, applying nitric acid, and completely arresting the bleeding. This gentleman did so well that he left London for the north of England in exactly one week.

This was the first case in which I used the clamp

with the screw attached to it ; and this improvement was suggested to me by the result of the case last detailed, where I was obliged to tie the bleeding vessels. The great value of this addition to the instrument was at once perceptible to myself and those gentlemen who were in the habit of assisting me.

Case IX.—A middle-aged lady, in a very weak and nervous condition from long persisting hæmorrhoids, was operated upon by the clamp and nitric acid, July 30th, 1862. Two large internal tumours were removed, no hæmorrhage followed, and, although the convalescence was protracted for a period of three weeks, she returned home free from protrusion.

Case X.—Mr. B—, aged thirty, was operated upon by the clamp and nitric acid for a considerable prolapsus of the rectum, August, 1862. No unpleasant result happened, and he was at the Exhibition on the sixth day.

Case XI.—A gentleman, aged fifty, was operated upon by the clamp and nitric acid, August 18th, 1862. I removed a large prolapsus on one side and a hæmorrhoid from the other. This gentleman had been operated on three years previously by a well-known and able surgeon, who had used the ligature. No bad result followed my operation. Bowels were

opened on the fourth day, and on the sixth he returned home into the country, taking a long journey.

Case XII.—C. M—, aged forty, was operated upon by the clamp and nitric acid for a severe prolapsus, in King's College Hospital, August 23rd, 1862. There was no hæmorrhage; the bowels were opened on the fourth day, and on the next day he was discharged from the hospital.

Case XIII.—A man, aged forty-five, suffering from severe prolapsus, consisting of the entire circumference of the mucous membrane, very vascular, was operated upon by the clamp and nitric acid, in King's College Hospital, Sept. 5th, 1862. The operation was a severe one; three clamps were used at three different points; the bleeding was smart, but the nitric acid effectually checked it, and the patient suffered very little. The bowels were opened on the fourth day, and the patient was discharged on the seventh. I saw this man a year afterwards; he was quite well, and had had no return of the prolapsus.

Case XIV.—A gentleman, aged forty-eight, was operated upon by the clamp and nitric acid, Sept. 20th, 1862. There were two internal hæmorrhoids of long standing situated very high up, and so close

together that I was tempted to include the two in one clamp; and having removed them, I applied the nitric acid thoroughly. Two hours after the operation, I was summoned, and found unmistakable signs of hæmorrhage. On introducing a bivalve speculum, a large quantity of blood came away, but by presssing the blades well up against the sides of the gut and introducing ice, the bleeding was soon arrested; there was, however, loss of blood to a considerable extent. But the patient did not keep to the house more than a week, and seemed to suffer very little. I have recently seen this gentleman, who tells me the cure has remained permanent.

Now, I must say a word or two about this case, which would seem to favour the view of those who agree that hæmorrhage is one of the objections to this operation; the fact is, the occurrence was entirely the result of my own carelessness and haste. I attempted to clamp the two tumours together, which was a great mistake; for after excision a portion of the cut surface, in which there must have been some considerable vessel, had escaped from the grasp of the blades, and had not been cauterised. Moreover, I think that in such cases as this the nitric acid should not have been used—the actual cautery should have been employed.

Case XV.—An elderly man was operated upon by the clamp and nitric acid for a prolapsus, in the

out-patient room of King's College Hospital, December, 1862. He walked home some distance the same afternoon, and visited me on the fourth day without any complaint. He said he had suffered very little after the operation.

This is the only instance in which I have operated and allowed the patient to walk out on the same day; although the case succeeded very well, I do not think it was a very wise experiment, nor would I recommend such a course of proceeding.

Case XVI.—General C—, aged seventy-two, was operated upon with the clamp, for extensive prolapsus of the rectum, on December 21st. The whole circumference of the bowel was down constantly, causing much annoyance. The parts were very vascular. I accordingly applied the actual cautery to the raw surface. The pain was but slight, and the bleeding was thoroughly arrested. The General kept his bed for three entire days only, was up at my house on the fourth day, and on that evening travelled 300 miles by the night mail.

Case XVII.—A man, between fifty and sixty, with a very bad prolapsus of the rectum, was operated upon with the clamp and actual cautery, January 15th, in King's College Hospital. Three large portions of mucous membrane were removed. On the fourth day the bowels were acted upon

without any sign of prolapse, and he left the hos- eight days after the operation, quite convalescent. In October following I saw him; there was no trace of the disorder.

Case XVIII.—This patient was not strictly under my care, but I was called into consultation upon it by my friend, Dr Wiblin, of Southampton, who had seen me operate with the clamp at the hospital, and was so pleased with what he saw that he was deter- mined to adopt it on the first occasion. Captain S—, aged forty, had suffered for many years from an immense prolapsus, attended with profuse bleed- ing, but had always been frightened to undergo any operation. The nature of the proceeding by my clamp was explained to him, however, by Dr Wiblin, and he consented. Accordingly, on February 7th, 1863, I went down to Southampton, and assisted Dr Wiblin in the operation. There were four distinct large protuberances forming the tumour which required removal; each of these was separately clamped and removed, and the actual cautery was carefully applied. The vascularity was excessive, but the cautery sufficed to arrest all bleeding. The operation was of necessity a very severe one, and the patient would take chloroform. Everything went on well afterwards; the bowels were opened by medicine on the fourth day without pain, hæmor- rhage, or prolapse; and I met him at Dr Wiblin's

house two weeks after the operation, perfectly well. Dr Wiblin was in London lately, and informed me that Captain S— remains perfectly well.

Case XIX.—John Baker, aged forty-nine, had been a patient under the physicians at King's College Hospital, with pyrosis and indications of some organic diseases. He was weak, emaciated and sallow, and was terribly troubled by a large prolapse of the whole circumference of the mucous membrane of the rectum. He was in that condition which would entirely forbid any operation by the ligature, but I did not hesitate to employ the clamp, much to the astonishment of some of my friends at the hospital. I removed the entire disease, April 11th, 1863, using the actual cautery. I removed three segments or tumours, and found the parts so exceedingly vascular that one vessel gave me a great deal of trouble, and seeing that the patient was so feeble I did not like to chance the risk of any bleeding, and accordingly included this vessel within a ligature. The bowels were opened on the fourth day, and the man left the hospital all right in two weeks.

Case XX.—Mrs P— was operated on with the clamp and cautery for a single hæmorrhoidal tumour, April 21st, 1863. She was walking about on the fourth day.

Case XXI.—Mr S—, aged sixty-nine, was operated upon for two large hæmorrhoidal tumours, April 30th, 1863, by the clamp and actual cautery. Everything went on well. The bowels were acted upon on the third day without pain or bleeding, and he walked out on the sixth day.

Case XXII.—Major C—, aged fifty, came to me, from Italy, for a prolapse of considerable size. I operated upon him with the clamp and cautery, removing two segments of diseased membrane, May 13th, 1863. Bowels were opened on the fourth day without bleeding. On the sixth day the Major was at my house, convalescent.

Case XXIII.—Dr — was operated upon with the clamp and cautery for a large internal hæmorrhoidal tumour, August, 24th, 1863. On the fourth day he called upon me at my house, and on the same day attended to his hospital duties, and in five more days he got married. I saw this gentleman the other day. He remains quite well.

Case XXIV.—A man, aged twenty-six, was operated upon with the clamp and cautery, September 1st, 1863. A large internal pile was removed. He walked up to my house, a distance of a mile, on the fifth day. I saw him lately. He remains quite well.

Case XXV.—J. W—, aged forty, was operated upon with clamp and cautery, at King's College Hospital, September 6th, 1863. Two large hæmorrhoids being removed, the patient left the hospital on the fifth day.

Case XXVI.—Rev. Mr L—, aged forty-one, almost bloodless from long-continued hæmorrhage, coming from a large mass of internal piles, was operated upon with the clamp and cautery, November 10th, 1863. It was a very severe operation; five distinct tumours were removed, one of them as large as a pullet's egg. The hæmorrhage was thoroughly arrested. Retention of urine followed this operation, but the patient was walking out in a week. I saw this clergyman a few weeks since, and he continues quite well.

Case XXVII.—Mr G— was operated upon by the clamp and cautery November 20th, 1863. Three internal hæmorrhoids were removed. Bowels were acted upon on the fourth day, and on the sixth day he went out on a visit.

Case XXVIII.—Mrs S— was operated upon with the clamp and cautery, November 22nd, 1863. This was a very bad case. The woman had been much weakened by hæmorrhage, and there were five distinct tumours. No bad results followed, and

she was up at the end of a week, attending to her house duties.

Case XXIX.—Mrs S— was operated upon by the clamp and cautery, February 6th, 1864. Two large hæmorrhoids were removed. She had chloroform. She was up on the sixth day.

Case XXX.—Mr S— was operated upon by the clamp and cautery, September 13th, 1864. Three internal hæmorrhoids were removed. The patient lay in bed two days only, and in a week he was quite convalescent.

Case XXXI.—Mr P—, aged sixty-three, was operated on by the clamp and actual cautery, October 1st, 1864. This was a very severe case. Three large internal hæmorrhoids were removed. There was such a large artery divided in one of the tumours, that on unscrewing the blades of the clamp it bled furiously, and it was necessary to apply the cautery repeatedly before it was sealed up. The bowels were opened on the fifth day without bleeding. The convalescence lasted over a fortnight in this case, the patient being extremely weak and bloodless.

Case XXXII.—Rev. Mr. C— was operated upon by the clamp and cautery for very severe prolapsus

of the rectum, November 7th, 1864. Three large portions of mucous membrane were removed. One part was very high up, and unscrewing the blades of the clamp, a large vessel bled fast. It was a very dark morning, and the patient had undergone a long operation; I therefore put a ligature around the vessel. Retention of urine followed in this case for five days. His bowels were acted upon on the fourth day, a good deal of coagulated blood coming away. On the eighth day he called upon me convalescent.

Case XXXIII.—Mr H— was operated upon by the clamp and cautery, November 8th, 1864. Two large internal hæmorrhoids were removed; retention of urine followed for twenty-four hours; bowels were acted upon on the fourth day, and on the fifth day he went out.

Case XXXIV.—A man, aged sixty-one, was operated upon by the clamp and cautery, in King's College Hospital, November 28th, 1864, for very severe prolapsus of the rectum, of twenty-five years' standing. Three large pendulous folds were removed. On the sixth day he was up, and on the eighth day he was dismissed. He showed himself at the hospital last Monday quite well.

Case XXXV.—A young married woman was

operated upon in King's College Hospital, for very bad prolapsus of fifteen years' standing, December 10th, 1864. It was the last and worst case I had ever operated upon by the clamp. It presented a good example of those cases where the prolapsus is dependent, not so much upon a morbid condition of the mucous membrane, as upon a weakened state of the sphincter; in this case the anal orifice was so dilatable that I could pass the whole hand into the rectum. The poor woman could not move about without the bowel constantly descending, and she suffered much. I operated upon her, taking away three large sections of the mucous membrane; and this part of the operation being finished, I removed by curved scissors four long slips of integument from over the sphincter, at right angles to the anal orifice. She was under chloroform. No bad results followed this severe operation. The bowels were opened on the fifth day without any sign of prolapsus; and on the tenth day, finding that the wounds were nearly healed, I ordered her to get up, The anal orifice had already become much more contracted. She left the hospital in a fortnight after the operation quite well.

I have now given, as briefly as possible, the record of my experience of this mode of treating cases of hæmorrhoids and prolapsus; and it appears to me that the result must be to prove to the most sceptical

that, at all events, the treatment by the clamp and cautery possesses the signal advantages which I have claimed for it—viz. safety, freedom from subsequent annoying and serious consequences, and saving of time. As regards permanency of cure, the same result will obtain as after the ligature, for the affection is bodily removed after the one operation as by the other; and if the disease should return at some future time, the mode of operation should not be blamed, because we know that very often the same causes which originally produced the disorder are still at work, and in course of time, if they are not obviated, they will be likely to beget a similar condition of things, no matter whatever plan of treatment has been adopted.

Since these lectures were delivered I have had much larger opportunities of testing the value of the treatment by the clamp and cautery. I have now treated by this means altogether 120 cases, and, being emboldened by my success, I have operated upon some of the most severe instances which can occur, and where the parts were most vascular and supplied with large vessels; but I am happy to say I have not met with a single case where any bad or even unpleasant results have followed. I have used the clamp in cases where I would not have dared to do so at the time these lectures were delivered, as I did not have sufficient faith in the styptic action of the hot iron in instances where there was reason

to suppose there would be considerably sized vessels divided. I have, however, succeeded in arresting the hæmorrhage in all cases, although I must confess that in a few the vessels were so large that it was needful to apply the cautery in a most liberal manner and repeatedly before the bleeding could be arrested. I believe, however, that I err upon the side of a too free use of the cautery, especially in private practice, and I think this is proved by the fact that in my hospital cases I use the hot iron much less freely, feeling that if anything should occur there is assistance to be immediately obtained; nevertheless, it has not once occurred that bleeding has taken place after the operation from the mucous membrane. I would not, however, wish to recommend a careless use of the cautery, because it undoubtedly might happen that if great care be not employed, bleeding might, to say the least, be very troublesome, if not serious.

I have had occasion to perform the operation on two patients twice within a period of six months, the reason of this being that the sphincter ani was so powerful that the parts could not be well protruded before the operation in either case, and a hæmorrhoidal tumour was overlooked, and in course of time descended and rendered it necessary that I should apply the clamp again.

I have not met with a single case where any con-

traction of the bowel has taken place, and in one instance where the patient died twelve months after a most severe operation from malignant disease of the bladder, I was enabled to examine the part operated on, and the bowel was apparently in quite a natural condition.

Since the last edition of these lectures was published I have had a much further experience of this operation, and I have operated between two and three hundred times in every kind of case, and in some of the utmost severity, and of enormous size, and at all ages, from the beginning of manhood to its very extreme; and I am glad to say that this extended experience convinces me more and more of the value of this plan of treating severe cases of hæmorrhoids and prolapsus, and of its applicability, especially to cases of this disease, where the surgeon would not venture to perform the operation by the ligature. I am glad to find that the operation is practised by many not only in Great Britain, but also over our colonies and in America. The numerous communications I have received bear witness to the estimation in which this plan of treatment is held. I still insist upon the almost absolute safety of the operation itself, although in two instances death followed it. I felt it my duty to make these two cases known to the profession, and a reference to the details, published in my article on the "Diseases of the Rectum," in Holmes' 'System of

Surgery,' will show that the cases were quite exceptional, and that the deaths were due to causes independent of the operation itself. I may mention that I have not had a single case where any of those particular effects which ensue upon the ligature has happened, viz. pyæmia, tetanus, secondary hæmorrhage, or long continued ulceration and abscess.

I shall not detail many of the cases on which I have operated since the lectures were delivered, but shall pick a case here and there out of my note book, which will further illustrate the value of the treatment in the more severe forms of these diseases.

Case XLI.—Mrs F—, aged fifty-five, was recommended me by Mr Altmann, of Caroline Street, Bedford Square.

April, 1865.—She was in a deplorable condition, having suffered for two years from hæmorrhage from the rectum. On one occasion her life was greatly imperilled by the large quantity of blood lost. Previous to my being consulted she had seen an eminent physician, who considered that she was suffering from some malignant disease of the liver; but as she was so much reduced by hæmorrhage, it was thought justiñable to perform an operation.

On the 25th I operated with the clamp and cautery, removing one large internal pile—there was no hæmorrhage nor other bad result. And

although this lady was in a wretchedly weak condition from the draining of blood which had been going on, she was able to walk about in two weeks after the operation. Mr Altmann wrote to me some time afterwards to say that she had got quite well, and that her supposed malignant disease of the liver had entirely vanished since the hæmorrhage had been stopped.

This was a case well showing the value of the treatment, for the patient was in such a state that any prolonged suffering after the operation might have produced serious consequences. Moreover, from the great loss of blood experienced, she would be especially prone to pyæmia from the use of the ligature.

Case XLVII.—Mr M—, aged forty-eight, sent to me by Dr Reginald Read. This gentleman was in a weak and exhausted condition from the effects of hæmorrhage which had been going on from the rectum. He had suffered more or less from prolapsus for nearly twenty years, and he had consulted an eminent surgeon some time previously, for the purpose of having something done, but being informed that the operation—that by ligatures—would necessitate withdrawal from business for two or three weeks he would not consent.

I operated on 28th July, removing the entire circumference of the rectum; there was not any bad

symptom following, and he was able to go to his place of business on August 1st.

This case illustrates one great point upon which I have insisted, and this is, that the convalescence is much shorter than when the ligature is used, and although this may be a matter of no moment to some, it is all important to men like this patient, who had a very large business to superintend personally.

Case XLVIII.—Mrs M—, aged seventy-four, had been troubled with a large prolapsus of the rectum accompanied with profuse discharge. She was sent to me by her son, a physician, who wished me to operate with the clamp if I thought fit. Although she was so aged, I did not hesitate to recommend the operation, and on September 20th I removed three large segments of mucous membrane by the clamp, whilst she was under the influence of chloroform. The operation was a severe one; but the bleeding was completely commanded, not a single bad symptom came on, and the old lady was down in her drawing-room in a week.

This case shows the advantage of this plan of operating on old persons. I suppose there are few surgeons who would like to operate in a severe case with the ligature, on a patient of seventy-four.

Case L.—Mr S—, aged fifty-two, had suffered

from hæmorrhoids for many years, and when I saw him in September he showed me a large mass composed of several internal piles, one of which was nearly as big as an egg and very vascular, the whole forming a large tumour.

He was a very nervous, highly scientific man, knew all about the particular kinds of operation for these diseases, and on my telling him that I would not object to use the clamp in his case, he elected to submit to this operation, which I performed on September 21st, while he was under chloroform. The tumours were so large and so very vascular that the operation was of a very prolonged and severe character, the cautery being required repeatedly before I could arrest the bleeding; this, however, was done effectually, and not a single bad symptom arose, and he was walking about his garden exactly one week after this severe operation.

This was the most severe case I had operated upon with the clamp, and the fact of my being able completely to control the bleeding in this instance gave me such confidence, that I felt I might be able to remove with the clamp any hæmorrhoidal tumour, however large or vascular.

Case XCVII.—Mr D—, aged seventy-five, consulted me in May, 1867. He had a large prolapsus which had troubled him for many years, and had

now become unbearable. I operated May 4th, removing several folds of mucous membrane. He was able to walk out on the 9th.

This case also shows the safety of this kind of operation at an age where it would not be at all prudent to use the ligature.

Case CI.—Rev M. B—, aged sixty, came to me from the West Indies, May, 1867. He had suffered terribly from prolapsus of the rectum for many years. About twenty years before, he had been operated on by the ligature in Edinburgh, with only partial relief. His complaint returned in the West Indies, and latterly became so unbearable that he was determined to throw up his duties, and come to England. Dr Dennehy, of the Royal Mail Service, sent him to me.

The prolapsus was enormous, nearly as big as the fist, and I almost hesitated to use the clamp; however, the sphincter ani was so dilated, and there was so much loose skin around, that it appeared to me the employment of the clamp, together with the liberal use of the scissors outside, might offer a fair chance of cure, and I therefore proceeded to operate May 29th. I removed three large segments of mucous membrane with the clamp, and applied the cautery liberally. The bleeding was very free, and one vessel especially gave me a deal of trouble, but the hæmorrhage was thoroughly arrested, and did

not recur. This patient suffered but little after this severe operation. I made him keep very quiet, and on the 7th of June I completed the operation by removing freely with the curved scissors all the redundant tissue around the anus.

A good deal of irritation followed this second operation, and a return of the prolapsus took place, and I was fearful that here at least I should meet with a failure; but I carefully reduced the prolapsus, which I found to be in a sloughy condition, and kept the bowels completely locked up for several days. They were acted upon by castor oil on the 13th without any recurrence of the prolapsus, and on the 15th he was able to take a drive. He went off to his native city, Edinburgh, in a few days more, and wrote to me thence a month after to say that he was quite recovered, and had not had any return of his prolapsus.

If any case were needed to show the value of this treatment in the most severe forms of the disease, we have it here. It is impossible to exaggerate the severe nature of the case; and, although I do not think that the employment of the clamp and cautery alone would have sufficed to bring about a cure, it formed a most important part of the treatment.

Case CXX.—Mrs —, aged forty, was admitted into King's College Hospital, in September, under my care, in the most deplorable condition from pro-

lapsus both of the uterus and rectum, to an immense extent, and of long duration. On examination there was a most extraordinary appearance of two large tumours, or rather one bilobed tumour; the anterior consisting of the prolapsed uterus, the posterior of the whole of the lower portion of the rectum, the latter being remarkable by the bright, soft velvety appearance of the mucous membrane, which was quite healthy. On further examination, it was found that the anus was greatly distended, and the sphincter correspondingly weakened, so as to give no support whatever. In fact, the poor woman was in a most pitiable state.

As the mucous membrane of the rectum seemed in a healthy state, and the prolapsus was dependent in a great measure on the weakened state of the sphincter, I thought it might be remedied by removing longitudinal folds of the skin at right angles to the anus, and then applying strong nitric acid to the mucous membrane in order to ensure contraction. I performed this operation a few days after her admission, and kept the bowels quiet for some time. The effect of this proceeding was to produce some improvement, and lessen the size of the prolapsus; but after the wounds had fairly healed I found that there was still considerable prolapsus when the bowels were acted upon. Accordingly, on November 9th, I operated with the clamp and cautery, removing four large segments of mucous membrane; there

was great vascularity, and one artery bled so freely after the clamp had been removed, that I was obliged to apply the cautery again very freely. No further bleeding took place, and when the bowels were acted on the fourth day there was no prolapse whatever; the remedy was further severely tested by a violent diarrhœa which attacked her eight days after the operation, but which produced no return of the malady, and she was dismissed from the hospital on the twelfth day, freed from the annoyance of the prolapse of the rectum.

This severe case also illustrates the necessity of a combination of the clamp and scissors; the free use of the latter, together with the nitric acid only, gave some relief; but when the superfluous mucous membrane was removed, the contraction which was produced both internally and externally, was sufficient to prevent the gut from falling.

One of the advantages which I claim for this operation is, that it may be applied in certain cases where it would not be prudent to use the ligature in consequence of the very slight constitutional disturbance which is produced. Thus, we every now and then meet with instances of severe hæmorrhoids or prolapsus where the local complaint is most distressing, and where at the same time there are some indications of some mischief in the brain or spinal cord. Now, in such cases where it becomes almost absolutely necessary to perform some operation, I

believe that the application of ligatures would be attended with considerable danger, but I would not hesitate to use the clamp. I will give illustrations of two such cases.

Case CLXXVIII.—A labouring man, aged 56, was sent into King's College Hospital, in September, 1869, with a very severe prolapsus of the rectum, which troubled him very much; but in addition to this, he had a very curious kind of paralytic affection which had existed for about three years. He could scarcely walk across the ward without assistance. As his prolapsus was so troublesome to him I did not hesitate to recommend the removal of the prolapsus by the clamp and cautery. I performed this operation on the 25th. I had to remove four large folds of mucous membrane; not the slightest bad symptom of any kind occurred, and the patient left the hospital in a fortnight.

Whilst this case was under treatment, one of a very similar character, and in like manner illustrating the peculiar advantages of this operation, occurred in private.

Case CLXXX.—Mr W—, aged 56, was sent to me by Mr Johnson, of Congleton. The patient had been for many years a great sufferer from prolapsus of the rectum, accompanied at former times with severe bleeding; this, however, had latterly alto-

gether ceased, but as usual under such circumstances the local malady had become much more troublesome, and he was compelled to wear a pessary, which, however, gave him no comfort. He had, moreover, of late years become affected with a kind of general paralysis, being able to move only with difficulty, and scarcely able to dress or undress himself. In other respects the health was good, and the intelligence was quite clear.

On September 30th I operated on the patient, whilst he was under the influence of chloroform, and I removed four large folds of mucous membrane with the clamp, using the cautery very freely. Not a single bad symptom occurred; the patient was out for a drive in eight days, and he returned to Cheshire before a fortnight from the date of operation.

Now, in both of these cases, but more especially the latter, I would not have dared to use the ligature, because such a large mass of tissue would have to be tied in either case, and we know that the effect of this operation, as well as the continued presence of the ligatures, is to produce a considerable shock upon the nervous system, and if there be—as in a case which I know of where death occurred suddenly after the ligature—some decided symptoms of disease of the nervous centres, it would be most imprudent to use the ligature, but as I have repeatedly shown that the use of the clamp and cautery is scarcely

ever followed by any amount of constitutional disturbance, I have no hesitation in preferring this operation in instances where relief is urgently called for.

It is not necessary for me to detail more cases. Those related will, I trust, well illustrate the truth of my propositions—that the treatment by the clamp and cautery, if properly adopted, is comparatively free from danger, that it is followed by much less suffering than if the ligature were employed, and that in general the convalescence is much shorter.

The foregoing observations were written in 1871, and my experience of this operation at that time extended over two hundred cases. Since this period I have treated more than two hundred cases of hæmorrhoids and prolapsus by the clamp and cautery, and I find I have notes of four hundred and fifty cases; amongst these have been instances of the worst possible description, where patients have gone about for periods varying from ten to twenty years losing their health from bleeding, or suffering in the most trying manner from the local distress and annoyance produced. Amongst them many have applied who have gone on to the verge of old age, suffering in such a manner that a considerable portion of their time each day has been consumed in returning a prolapsus bowel or hæmorrhoidal mass when at the closet. Others have come to me

who for years have tried those abominable appliances called anal trusses or pessaries, by the wearing of which they are deluded into the belief that in time the prolapse would be prevented annoying them. One distinguished military officer in the prime of life came to me after enduring all sorts of discomforts in his campaigns, and pulled out of his pocket a large stone on which he was obliged to seat himself after the bowels had acted. Many men, and more numerous women, have applied who have allowed the bleeding to go on from the parts unchecked for years, in the belief that this loss of blood was beneficial and would obviate other disorders until they have had no blood in their vessels, properly so called, and their organs have become so weakened that years must elapse—if ever—before a restoration to health can be brought about when the bleeding has been arrested by an operation.

I have had to operate on several of such cases, where the weakness from continued loss of blood was so great that even with all the confidence I feel in the use of the clamp and cautery as a safe measure, I have not undertaken the operation without a certain amount of misgiving; but curious to relate, these very cases have generally turned out most satisfactorily. It is most important, however, in these cases to apply the cautery very freely as the blood has been so robbed of its red particles and coagulating power that it very readily oozes away,

and is with difficulty arrested unless by a very liberal application of the heated iron.

I have met with three deaths only, after this operation, since 1871; two of which have been made known to the profession. In the first of these cases the patient was in wretched health, and had to undergo a severe operation; chloroform was given most carefully. Soon after the operation vomiting came on and continued incessant for six and thirty hours when it ceased, and was followed by intense jaundice and death in four days. Unfortunately, there was not any post-mortem examination. It was impossible to close one's eyes to the suspicion that the chloroform had something to do with the death; in all probability, too, there was some old mischief about the liver which was relighted by the combined effect of the anæsthesia and the operation. The second case, I regret, was undoubtedly due to the operation itself; it occurred to the person of a fine big man, between sixty and seventy, who had had a large prolapsus for twenty years. I performed the operation upon him with the clamp and cautery, and in consequence of the size of the mass necessary to be removed the bleeding was very severe, and before this could be stopped it was necessary to apply the cautery very freely; indeed, over and over again. The bleeding was arrested, but the operation was extremely severe. In about thirty-six hours he got a rapid pulse and pain in the super-

pubic region; symptoms of peritonitis supervened, and death occurred in about four days from the operation. Now, in this case I have reason to believe that the peritoneum must have been either directly or indirectly interfered with in this operation. The prolapsus was very large, had existed for many years, and by its constant descent it is very probable that the peritoneum had been, as it were, pulled down by the prolapsed parts; and hence it may have actually been interfered with in the operation, or it was involved in the inflammatory change which took place in the process.

I lamented this case very much, for I firmly believe it might have been prevented. In such a severe case I ought to have been contented with taking away less of the mucous membrane, or I should have performed the operation at two sittings instead of accomplishing it at one. Since this case occurred to me three years ago, in order to avoid the possible danger of similar mischief being produced, when I have to deal with an instance equally severe, I content myself with clamping less of the mucous membrane, and dealing liberally with the tissue outside. By this means as good a result is secured without the danger of any implication of the peritoneum.

In the third case where death followed this operation, and which occurred since the last edition of these lectures was published, an elderly gentleman,

who had been much in hot climates and was in weak health, sank three days after a very severe operation, which was followed by considerable bleeding. There was every reason to believe he had disease of the heart, for during the inhalation of the anæsthetic the most formidable symptoms occurred, and it was necessary to suspend its action. Great prostration ensued with other signs denoting heart symptoms, and he sank three days afterwards. There was no examination after death.

Out of so many cases of all differences of age and extent of disease, it would be supposed that I would have met with some complications in the form of secondary abscess and fistula, effects which are known to result from the ligature; I have only seen a few instances where a fistula appeared as the result of the operation.

It is somewhat singular that out of all this number of cases I have only met with two instances in which erysipelas occurred, and this happened at a time when there was a great deal of this disease about in London.

Of pyæmia after the use of the clamp and cautery I have not had a single case. In one instance some symptoms of this disorder did appear, and I was fearful I was to meet with a case, but happily they subsided, and none of the severer signs of this disease were manifest. As I have previously stated, it appears as though the action of the cautery was antagonistic to the influences which

produce pyæmia; but yet it is remarkable that in some of the bad cases I have operated, where the system has been so reduced by loss of blood, pyæmia has not occurred; anyhow, it is a significant fact.

I have, especially since the last edition of this work appeared, operated on cases of remarkable severity, where the tumours were so large and so numerous that repeated applications of the clamp and cautery were necessary, and yet it has been extraordinary to witness the freedom from suffering and rapidity of convalescence which have obtained in these severe cases.

I have also operated on individuals of a very advanced age, where certainly it would be considered imprudent to use the ligature; thus, in one instance I removed a large growth, partly external and partly internal, from a gentleman aged seventy-eight. And in a notable instance occurring in the practice of Mr Tate, of Camden Town, I hesitated not to operate on a gentleman, aged eighty-one. He had long suffered with hæmorrhoids, and had recently had an attack of paralysis, from which he had recovered. The tumours had suddenly descended and could not be returned, and when Mr Tate requested my assistance I found that there was a large tumour composed externally of thickened and œdematous skin, and within this circle were several hæmorrhoidal tumours protruding; he was

suffering much, locally and constitutionally. Notwithstanding his age and the previous attack of paralysis I strongly recommended the removal of the hæmorrhoids by the clamp and cautery. I performed the operation on the following day; no bad symptom resulted, and in about a fortnight the patient was enabled to go down to the seaside, where he soon recovered.

Of course, as a rule, I would not advise that this operation should be done at such an advanced age as in these two cases, but where exceptional circumstances warrant its performance I would not hesitate to adopt it, as in nearly all the cases I have operated on the constitutional disturbance is of a very trifling description. In a case I had with Dr Cresswell, of Norwood, there were very great complications; there was a large mass of internal hæmorrhoids of the most vascular kind, a polypus of considerable size, and this covered a large ulcer; moreover, the patient had a severe stricture of the urethra. The operation here was of the severest character, for the tumours were so vascular it was necessary to apply the cautery most freely; to remove the polypus, and make a free division of the large ulcer; yet it is extraordinary how little constitutional disturbance was produced. He got retention of urine, but, thanks to the manner in which Dr Cresswell managed his stricture, no serious effects were produced by this, and the patient shortly made a most excellent recovery.

During the six years which have elapsed since the last edition was issued I have had a very large additional experience of the operation by the clamp and cautery, and many hundreds of cases have been under my care, and of course I could give details of some very important and striking cases which would illustrate still further the character of this operation, but such details would only be wearisome, and would not furnish any more material evidence in favour of this particular method than that which has been already afforded. I may, however, mention that this largely increased experience has demonstrated more clearly, if possible than before, the fact that the operation is followed in the majority of cases by scarcely any constitutional disturbance. A few hours after the operation has been performed the patient is comparatively well and has very little disturbance of any kind; certainly none of a serious character. Even the pain after such an operation, which might be expected to be severe, is in some cases very slight, lasting generally about two hours. In some of the cases requiring very extensive operations—and these from the delay of patients in submitting to the ordeal are numerous—the pain has been severe, but I find that this is very much mitigated by the plan of applying sponges immersed in hot water, wrung dry, and applied to the part operated on; formerly I used iced water, but although that gave relief in some cases I found

it fail in others, whereas the application of water as hot as the patient can bear it almost always gives great relief.

The most troublesome symptoms which occur are retention of urine and the accumulation of flatus in the bowels. Retention more frequently occurs after this operation in women than in men, but, I think, not so frequently as one might expect. It is comparatively rare in men, and, I believe, it may be often prevented if the patient be told to keep his water as long as he can do so, and then not to attempt to pass it when in bed, but to stand erect; in most instances he will in this way be able to empty his bladder. Careful daily inspection, however, of this organ should be made even in instances when some urine has been passed, for the bladder may yet be half full of urine and cause considerable annoyance.

The accumulation of flatus in the intestines is a circumstance contingent upon any operation which necessitates locking up of the bowels for a period of three or four days and an adherence to liquid diets. This annoying condition, however, is obviated in a great measure by careful dieting, the avoidance, for instance, of bread or other farinaceous food, and by medicine. I am in the habit of prescribing for my patients on the day after the operation a mixture containing three or four grains of sesquicarbonate of ammonia and three minims of sedative solution

of opium, every four hours, until the bowels can be acted on by aperient medicine. As a rule castor oil is the best for the first two occasions; subsequently a pill, containing two grains each of watery extract of aloes and compound colocynth, is found to act efficiently.

The pain after the first action of the bowels varies much, and it is difficult to account for the absence of it in some very severe operations and its presence when the measure has not been at all of a severe character. Just as I am writing I am attending two patients, both men in early manhood, and both requiring severe operations. In the one, where the local suffering before the hæmorrhoids were removed was intense, the action of the bowels was effected on the fifth day without any pain at all. In the other, where the local mischief was not so severe and where some comparatively small and quiescent tumours had been removed by the clamp and cautery, the action of the bowels was followed by several hours of considerable suffering. I cannot at all explain this.

In order to lessen the pain after the first action of the bowels, I have devised the plan in those cases, particularly where there is spasm and constriction of the sphincter attendant upon the hæmorrhoids, of making a free cut through this muscle as in operating for fissure of the anus, and in such instances the plan succeeds, whilst there is no

material addition to the magnitude of the operation. The local swelling is sometimes considerable and produces annoyance. The skin at the verge of the anus becoming swollen and infiltrated, the continual use of lead lotion, into which pieces of ice have been dissolved, will relieve the pain and diminish the swelling to a great extent.

A very remarkable accident, which I have already made public, occurred in my practice some time since. A middle-aged man came into King's College Hospital with an enormous prolapsus of the whole circumference of the bowel as large as a cocoa-nut; it had been operated on without any benefit. I determined to give the man the chance of a cure, and accordingly operated on him with the clamp and cautery. I removed three segments of mucous membrane, and then snipped away larger portions of integument at right angles to the anal orifice. Unfortunately, just as the proceeding was being finished, he began to vomit violently, the weakened coats of the bowel gave way, and a loop of small intestine protruded through the wound and was with difficulty replaced; of course I anticipated a fatal result from the injury to the peritoneum, but the patient was placed well under the influence of opium for several days, the bowels were locked up for the same time, and not a bad symptom resulted. It is probable that in my desire to remedy this severe case I clamped too deeply, and that the

violent action of the abdominal muscles produced by the vomiting was such as to ensure this giving way of the bowel. In another such case we would be taught by this occurrence to operate without any agent which produces vomiting.

In concluding this chapter I must impress upon those who employ this operation the necessity of using instruments of the very best construction. As I have before stated, the parallelism of the blades of the clamp when closed must be perfect, and the action of the screw must be easy and free. Messrs Matthews have constructed them for me with admirable precision to my orders. I would also strongly advise the freest application of the cautery when the tumours are large and very vascular, and the divided part should not be allowed to escape from the grasp of the clamp until every vessel is thoroughly cauterised; if this be well attended to, there need be no fear of hæmorrhage.

I must say one word about the possible occurrence of contraction after this operation. I stated in an earlier edition that I had not met with an instance, but since that was written I have met with three instances where contraction occurred, requiring the use of bougies; but this circumstance was owing to my having taken away too much of the external skin. At one time I dealt pretty liberally with the external skin where this was redundant, but it is my custom now to interfere as little as possible with

this, except, of course, where there are extensive folds and indurated masses; even then I only remove the superficial portions, for sufficient absorption of the parts will in course of time take place so as to prevent annoyance.

I cannot help also expressing my satisfaction that this operation has become established as a recognised proceeding in surgery. Much opposition was excited against it at first, and some writers of repute even strongly criticised it, but I have been pleased to find that these very gentlemen adopt this practice, in certain cases at least; but I must protest against the expression of opinion that it is mainly adapted for the slighter forms of hæmorrhoids and prolapsus, and not for the more severe cases. On the contrary —and I am justified by ample experience in saying this—it is in the more severe instances of hæmorrhoids, and where there is extensive prolapsus, either with or without the tumours, that the good effects of the treatment by clamp and cautery are seen. It is true that I never use the ligature now, and, therefore, I use the clamp and cautery in all cases requiring operation, simple or severe, but it is in those very bad cases one occasionally meets that I have seen the remarkably good effects of this proceeding, these effects consisting in the very slight amount of constitutional disturbance, the comparative freedom from local mischief, and the rapidity with which convalescence is brought about, and I have

more confidence than ever in recommending this treatment to the profession, not only in the slighter forms of these troublesome maladies, but in those of the gravest character.

THE

PAINFUL ULCER OF THE RECTUM

That peculiar form of ulceration met with at the extremity of the rectum, and usually known by the name of fissure of the anus, or painful ulcer of the rectum, is worthy of special attention, insomuch as it is not uncommonly associated with hæmorrhoidal disease, is frequently mistaken for that or other morbid affection, and is productive of perhaps more suffering than any other disorder of so local and limited a nature.

The pathology of this affection is somewhat obscure. It is probable that the disease is produced in the following manner :—The patient suffers more or less from habitual constipation, and during the straining efforts which take place a slight rent of the mucous membrane occurs, and, in consequence of the periodical movements of the lower part of the bowel and the passage of hardened fæces, the breach of surface becomes more extensive, and is prevented

from healing, and that which at first is only a linear fissure, becomes a decided ulcer. The formation of such an ulcer is, moreover, favoured by the peculiar constitution of the bowel, which, at its lower extremity, presents several sinuses or pouches, in which fæcal matter or other foreign bodies are liable to be entangled. It is not uncommonly noticed, also, that one or more hæmorrhoidal excrescences are seen at the verge of the anus in connection with the painful ulcer, and it is very probable that the disease in question is originally produced by the mere mechanical impediment of fæcal and other matters at the base of these tumours, which, begetting irritation and local inflammation, lead on to the formation of small circumscribed spots of ulceration. The view that constipation is the most favorable cause of the painful ulcer derives strength from the circumstance that the affection is met with most frequently in women, who generally suffer from constipation more than persons of the opposite sex.

The symptoms complained of by those who labour under this affection are well marked and peculiar, so much so that it is surprising to meet with cases where the malady has not been suspected, much less discovered, by the medical attendant. In many cases the patient complains of more or less acute pain during the time that the contents of the rectum are being evacuated; this increases and becomes aggravated after the action of the bowels, and

lasts for a period of one or more hours, after which it subsides. In other instances the pain is not experienced during the time of defæcation, but after an interval varying from ten minutes to an hour it comes on, and is increased until it is described as actual torture. In one case which I recently saw, the suffering was so acute a short time after the action of the bowels, that the patient writhed in torture, and required large doses of opium to relieve him. When these sufferings had been endured for several hours, a complete subsidence ensues, and there is a freedom from pain until the next call to the closet, when a similar condition of suffering is produced. At first the general health is not much affected, but after the disease has lasted for a period of some months, the constitution begins to suffer unmistakably. The patient becomes pale, sallow, and listless ; complains of pains in the loins and down the thighs, and is very frequently reduced to a great extent of debility. In women the symptoms are so like those dependent upon uterine disease that not unfrequently the real disorder has been overlooked, and repeated local applications have been made to the womb, whilst in reality the rectum has been the offending part.

As an illustration of this I may mention that a recently married lady was brought to me by her husband, a medical man. She was suffering from severe pelvic symptoms, which had sadly reduced

her health; those belonging to an ulcer of the rectum were not well marked, but some of them existed. She had been treated by one of our most eminent obstetricians; the remedies had been entirely devoted to the uterine organ, but had signally failed. I made a careful examination, and without much difficulty discovered an ulcer on the anterior or vaginal wall of the rectum, above the sphincter. By appropriate treatment the disease was soon cured and all the lady's general and local disturbances rapidly disappeared.

When the disorder has lasted for some length of time, there is a slight discharge of purulent fluid streaked with blood, but in some instances the attention of the patient is not directed to this symptom.

In one well-marked case which I saw some little time since, the only thing the patient complained of was a considerable irritation of the anus; there was not any pain. On examination I discovered a small ulcer at the verge of the anus, which had evidently existed for a long period.

When a patient presents with the symptoms of this ulcer, the most careful examination should be instituted, for the real nature of the affection, especially in certain instances, may be readily overlooked. He should be made to kneel down, or, if a female, to lie down on the side, with the buttocks well exposed to a good light; the surgeon should

then gently and carefully expose the anal orifice, and desire the patient to make a straining effort. If the disease exist, its anal extremity will come into view, and will look exactly like a simple fissure or rent. If, however, the patient further protrudes the parts, and some little force is employed in separating the sides of the anus with the thumbs, the edges of the fissure will diverge, and its true character will be observed. Not unfrequently a small tumour or hæmorrhoidal excrescence will be found at the verge of the anus; and on well exposing this, the fissure or ulcer will be seen at its base, hid, as it were, behind it. In fact, the existence of this small tumour is a pretty correct indication of the presence of the ulcer.

The situation, form, and appearance of the ulcer differ. Thus, in one instance, the disease may be so located as to be almost entirely without the verge of the anus, implicating the sphincter but slightly, and be readily brought into view. In another case it may be seated quite across the fibres of the sphincter muscle, and then only a portion of the ulcerated surface can be brought into view. The shape of the ulcer varies—it is round, oval, or triangular, generally measuring from the eighth of an inch to half an inch in length. Its surface presents in one case the appearance of a bright red colour, in another a greyish colour. When the disease is recent, the edges are level with the ulcer;

if, however, it has existed for any length of time, the borders are raised and indurated.

Sometimes there are two ulcers, or rather one ulcer is separated into two portions by a process of integument. Thus, in one instance recently under my care, there were found to be two small hæmorrhoidal excrescences at the verge of the anus, situated about half an inch apart. On separating the sides of the anus, a large ulceration of a triangular form was seen, its base being bounded by the two tumours, and its apex running into the bowel, and through the centre ran a raised process of integument, which almost completely produced the formation of two ulcers.

When the ulcer or fissure is situated within the external sphincter muscle, or when there is much contraction and spasm of the part, it is difficult to get a view of it, or only a portion of the abraded surface can be seen. Most valuable information may in this case be obtained by the use of the finger, introduced carefully into the bowel, when the peculiar rough sensation is imparted to it, which can hardly be described, but which cannot well be mistaken. In most cases, too, when the finger of the surgeon is introduced, the patient experiences most acute pain, which fact greatly assists the diagnosis.

Every now and then a patient will complain of the well-marked symptoms of this disorder, and yet,

on examination, nothing can be seen or even felt beyond, perhaps, a slight roughness at some particular spot of mucous membrane well within the sphincter. Even an examination by the speculum may fail to detect any decided ulceration. These cases are rare; but one occurred to me only the other day. The symptoms were well marked, and yet I could detect nothing like ulceration even with the speculum; but, on introducing the finger, a very slight roughness was observed at one spot, and the contact of the finger produced violent pain. This gentleman had previously consulted two well-known surgeons, one of whom had affirmed that an ulcer existed. The other gave the contrary opinion.

In by far the majority of cases the painful ulcer is met with at the posterior verge of the anus, nearly or quite in the median line.

I think, I may state, from my own experience, that in nine tenths of the cases the ulcer has been found thus situated. Now and then, but rarely, it is met with in the front and in the middle, and occasionally it is seen on one side.

Although the painful ulcer of the rectum is productive of the utmost amount of suffering, it may be remedied more easily, perhaps, than any other severe disorder. In those cases where the ulcer is seated so low down as to be within the view of the surgeon, the careful application of the solid nitrate of silver from time to time will bring about a cure. Several

applications may be necessary, and no other remedial measure will be required; but, should this not succeed, an ointment made of the cinereous oxide of mercury, in the proportion of half a drachm of the mineral to one ounce of lard, should be used. In other instances the daily introduction of a full-sized bougie made of wax or of yellow soap will be followed by the best results. During the time that these agents are employed, great care should be taken to produce a proper action of the bowels, and a healthy state of the secretions, by small doses of calomel and rhubarb.

I have succeeded, in some severe cases, in bringing about a cure by the careful application of such means as I have just mentioned.

I believe that many cases of the painful ulcer may be treated satisfactorily in this way, especially when the disease is so situated as to be brought readily into view, but when such is not the case, and when there is associated with it—as frequently occurs—a spasmodic contraction of the sphincter ani, a surgical operation is required. It is, however, one of a simple character, and most certainly resulting in success if properly performed. The French surgeon, Boyer, to whom we are indebted for the correct treatment of this disease by operation, acted upon that sound principle which is now so much recognised in the adoption of surgical means, and which consists in keeping parts diseased or injured, and liable to be injuriously affected by motion, in a

state of perfect quiescence. He practised the division of the sphincter muscle, and the painful ulcer being no longer affected by muscular movement was found to heal. The operation in his hands was, however, a somewhat severe business, as a large wound was made; but now, thanks to the suggestion of the late Mr Copeland, surgeons, whilst recognising the same principle as influenced Boyer, are content with making only a limited incision, so as to fairly cut through the ulcer, and only divide a portion of the fibres of the sphincter muscle. Some surgeons even suppose that it is not necessary to divide any of the fibres of the sphincter, and simply recommend an incision through the ulcer; but it must be borne in mind that a fair incision to the bottom of the ulcer will of necessity involve some portion of the sphincter. The rule I adopt and would recommend is, to carry the incision to such an extent as will produce a sensible dilatation of the anal orifice. This is readily ascertained by introducing the finger after the operation. If the ulcer be fairly divided, and with it some of the fibres of the sphincter, the contraction of the lower part of the bowel will be much diminished when the finger is introduced, and this is a pretty certain indication that the necessary incision has been effected.

The operation is very simple. Whilst the patient is lying on the side the surgeon introduces his left forefinger, well oiled, into the rectum, turning its

bulb in the direction of the ulcer. He then introduces a narrow, straight probe-pointed bistoury, flat along the finger, until its point has reached beyond the extremity of the fissure, when it is turned round with the cutting edge against the sore; and as it is brought out, the necessary incision is made. If there be any hæmorrhoidal excrescences or flaps of skin coexistent with the ulcer, these should be removed with the scissors. A small strip of oiled lint may be introduced to keep the wound apart, but this is not necessary. I invariably pass up a suppository made of pil. saponis co., and extract of hyoscyamus, six grains of each, immediately after the operation. Of course the bowels should be well cleared out both by medicine and enema before the operation, as there is much less chance of any action occurring until a period of three or four days has elapsed. The good result of this proceeding will be seen when the bowels are first moved by medicine. The peculiar pain which was so distressing previously, and which lasted, perhaps, for half an hour or an hour, will be replaced by the smarting caused by the passage of fæcal matter over a raw surface, and which subsides in a few minutes. On the second occasion, perhaps, even this will not be felt, and, in the majority of cases, the cure will be complete in a fortnight. Sometimes it will be necessary to dress the wound with some stimulating lotion, and to give some of the confection of black pepper, but, after a

large experience, I have seldom found these remedies called for.

I have already, when treating of the subject of fistula, referred to the frequency with which sinus is connected with this form of ulcer, and in this way producing an internal fistula. So frequently have I noticed this that I strongly recommend a very careful examination of the rectum with the bivalve speculum before any incision be made, for if the knife be used first, the effusion of blood will prevent the surgeon from thoroughly satisfying himself as to the true state of things. I have, therefore, lately been in the habit, when the patient is ready for operation, of introducing the speculum, and by this means getting a good view of the ulcer. By the careful application of the probe the surgeon will soon be able to ascertain whether any sinus exists in connection with the ulcer, or if it does exist, as to what extent the coats of the rectum are involved. If only an ulcer exists, the operation can be easily finished by drawing a sharp knife through the part well opened to view by the dilatation of the speculum, and if a sinus is found to exist, a director should be inserted into the opening and the sinus should be thoroughly laid open upon it. This will be found a very efficient method of operating, and under the circumstances of the necessity of having to examine for an internal fistula or polypus, it may be looked upon as a better

procedure than the usual one of introducing the finger, and cutting upon that as a guide.

One word as to hæmorrhage following this simple operation. Usually there is no trouble, but now and then free bleeding does occur, and may cause anxiety to the patient and friends. It may happen that a vessel may be encountered and only partially divided, and thus, as happened in a case I operated on for Dr Wheeler, of Bexley, a great deal of bleeding went on for some hours. It will be well, therefore, to make a careful examination before the patient is left; and this is also one of the advantages of operating with the aid of a bivalve speculum.

I must direct attention to one point connected with this disorder, viz. the great frequency with which it is accompanied by a polypus of the rectum. During the last few years I have had a very large number of these cases under my care, and it is extraordinary to notice how frequently a polypoid growth has been found in connection with it. It is generally a growth of a more or less fibrous character that is connected with it, and it is generally found above the ulcer. Sometimes this tumour is only of small size, not bigger than a grape; in other cases it may be as large as a nut; in some of the instances I have met with I only discovered the presence of the growth after I had finished the operation by introducing the finger for the purpose of passing a suppository up the bowel. This accidental discovery

occurring several times led me to make a point of instituting a careful inquiry as to the presence of a polypus in connection with the painful ulcer. Of course it is absolutely needful to remove this foreign body, for if it be left behind its presence would render the operation on the ulcer futile.

This disease is liable to be overlooked, more especially in females, as the symptoms in them are more severe and complex, and not unfrequently referred to the uterus, or, if it be accompanied with hæmorrhoids or prolapsus, is treated for either of these affections. In the following case the nature of the disorder was entirely overlooked, and produced most distressing symptoms.

Case.—I was requested to see, in September, 1859, a single lady, aged twenty-five, who had been confined to her bed for some time with an affection of the rectum. She had been troubled with prolapsus for two years, and, consequently, the present symptoms were referred to this disorder. Various kinds of treatment, including leeches, had been used in vain. She had severe pain when the bowels acted; this increased afterwards, and became agonising, lasting for hours, when it subsided. The general health was much pulled down.

On examination, a single hæmorrhoidal excrescence was seen at the posterior verge of the anus, and concealed by this was a fissure, which, when the

borders of the orifice were drawn aside, was found to be an ulcer of the bowel, with a smooth, florid surface and raised edges. On introducing the finger great agony was caused, and the peculiar rough feeling was imparted to the touch.

On the next day I fairly divided the ulcer, together with some fibres of the sphincter, after the patient had been placed under chloroform. Four days afterwards I visited her, and found the most marked change in her appearance. She expressed herself as having had complete relief from the operation, and a fortnight subsequently I saw her medical attendant, who informed me she had regained her health and strength.

In the following case the disease was supposed to be referred to the uterus and one of the sequelæ of parturition, and the medical gentleman who attended the lady in her confinement was unjustly blamed for having been the cause of the symptoms.

Case.—I was requested by a physician in London to see a married lady, aged twenty-five, who had been suffering much since her confinement, three months previously, from painful symptoms about the lower part of the pelvis. As they were not well defined, it was supposed that they depended upon some injury in the labour. I ascertained that there was almost constant pain about

the rectum, both before and after the action of the bowels, and that this was much aggravated by any movement. The signs were not clearly indicative of an ulcer of the bowel, but on instituting an examination, I discovered a small fissure just within the verge of the anus, and so situated that on the patient protruding the parts its whole extent could be well seen. As it was very slight, I endeavoured to heal it with nitrate of silver, but after two or three applications no benefit accrued. Accordingly, on the 21st, I divided the ulcer fairly. On visiting her two days subsequently, the bowels had been opened without pain. This relief continued, the wound put on a healing appearance, and in a few days she got quite well.

I have in my own practice met with more cases of painful ulcer of the rectum in women than in men, and certainly the suffering is much more marked in them than in the opposite sex. Why it is so I cannot explain, any more than I can the undoubted fact that women suffer much more from the effects of hæmorrhoids, and from the surgical treatment which is adopted.

Now and then cases are met with where there are one or more cracks present in the radiating folds of skin at the margin of the anus, not involving the sphincter, and very superficial. I have seen much annoyance caused by them, and sometimes

they are difficult to heal. The most appropriate treatment is the prevention of constipation, the ablution of the parts with soap and water, and the application of a strong solution of nitrate of silver by means of a brush. I have had occasion, in one or two obstinate cases, to make an incision through them, as in the ordinary painful ulcer.

Small ulcers are not unfrequently seen amongst our hospital out-patients, as the result of gonorrhœal and venereal matters coming into contact with the parts. Careful cleanliness, and the use of nitrate of silver will get them well; but if there be much neglect, one of these ulcers may become peculiarly obstinate and painful, as in the ordinary irritable ulcer, and require division.

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Allingham on Diseases of the Rectum, 14
Anatomical Remembrancer, 4
Anderson (McC.) on Eczema, 12
Aveling on the Chamberlens and Midwifery Forceps, 6
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Coulson on Diseases of the Bladder, 14
——— on Stone in the Bladder, 14
——— on Syphilis, 14
Courty's Diseases of the Uterus, Ovaries, &c., 6
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Eade on Diphtheria, 12
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Fox's (T.) Atlas of Skin Diseases, 13
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Gaskoin on Psoriasis or Lepra, 13
Gay on Hæmorrhoidal Disorder, 13
Gill on Indigestion, 10
Glenn's Laws affecting Medical Men, 14
Godlee's Atlas of Human Anatomy, 3
Gowers' Diseases of the Spinal Cord, 9
——— Epilepsy, 9
——— Medical Ophthalmoscopy, 9
——— Pseudo-Hypertrophic Muscular Paralysis, 9
Granville on Nerve Vibration and Excitation, 9
Habershon's Diseases of the Abdomen, 9
——— Stomach, 9
——— Pneumogastric Nerve, 9
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Hardwicke's Medical Education, 14
Harley on Diseases of the Liver, 9
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Harrison's Surgical Disorders of the Urinary Organs, 1
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Stimson on Fractures, 11
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——— Poisons in relation to Medical Jurisprudence, 4
Teale's Dangers to Health, 4
Thompson's (Sir H.) Calculous Disease, 13
——————— Diseases of the Prostate, 13
——————— Diseases of the Urinary Organs, 13
——————— Lithotomy and Lithotrity, 13
Thompson's (Dr. H.) Clinical Lectures, 8
Thorowgood on Asthma, 9
——— on Materia Medica and Therapeutics, 7
Thudichum's Pathology of the Urine, 14
Tibbits' Medical and Surgical Electricity, 10
——— Map of Motor Points, 10
Tidy and Woodman's Forensic Medicine, 4
Tilt's Change of Life, 6
—— Uterine Therapeutics, 6
Tomes' (C. S.) Dental Anatomy, 12
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——————— Lectures on Dermatology, 13
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——————— Healthy Life and Dwellings, 5
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